

**ESTABLISHING THE FACTS:
CONRAD GESSNER'S EPISTOLAE MEDICINALES
BETWEEN THE PARTICULAR AND THE GENERAL**

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ABSTRACT

Establishing the Facts: Conrad Gessner's *Epistolae Medicinales* between the Particular and the General

A town physician in Zurich, famous for his *Historia Animalium* and his *Bibliotheca universalis*, Conrad Gessner (1516-1565) was also an indefatigable letter-writer who left an abundant, though largely unpublished and unexplored, correspondence. In this dissertation, I examine his printed and manuscript letters and attempt to show how sixteenth-century epistolary practices shaped early modern knowledge of nature and of medicine. Letter writing and letter-reading represented a central part of early modern scholarly life, one of the means of self-presentation scholars had at their disposal in order to confirm their belonging to the Republic of Letters. This membership was reinforced by a constant flow of exchange of natural artefacts, books, and remedies. But letters did not merely circulate objects: their essential material was news. Medical letters were an important aspect of Gessner's medical practice. Patients and colleagues wrote to ask for epistolary consultations and tell their own case stories, providing him with fuel and experience to share in the exchange of particulars, and with questions he could circulate within the learned community. Standardised into *historiae*, information was submitted to the consensus of the correspondents' own networks and consolidated into generally agreed facts, capable of becoming the foundation for generalisation. Letters, however, did not cease to exist once their role in the epistolary dialogue was finished: they remained, very materially, among Gessner's notes and bookshelves. He incorporated them in his treatises, or cut and pasted them into his own collections of medical writings. Later, they were collected by his heirs, and turned into a published selection of Medical letters that constituted both a memorial to their master and a monument of knowledge made out of matters of fact, the essential content of early modern knowledge.

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CHAPTER 1: INTRODUCTION

In his *Bibliotheca medicinae practicae* published between 1776 and 1778, Albrecht von Haller (1708-1777), a physician in Berne, thus reviewed Conrad Gessner's *Epistolae medicales*:

Three books of letters by Gessner, Zurich, 1577, in 4o, edited by C. Wolf. They were written to Johannes Crato, Achilles Gasser, Theodor Zwingger, Felix Platter, Benedictus Aretius, Adolf Occo, Holtzach, Johannes Fabricius etc. This edition was made without any care, and the chronological order was not observed; however, the variety, candour and erudition with which they are everywhere filled, are extremely pleasant. They are most helpful for praxis and for the history of medicine. This most amiable man turns his back on Paracelsus and the Paracelsian Phaedro.¹

Perhaps the most interesting point of this critique, one among several thousands in Haller's *Bibliotheca medicinae practicae*, is its uniquely enthusiastic manner – one that contrasts strongly with the matter-of-fact tone he usually adopted in his reviews. Gessner's *Epistolarum Medicinalium libri III* were not, though, a major opus of the Zurich town physician and scholarly star of the sixteenth century. His *Bibliotheca universalis* or his *Historia Animalium* had gathered in an encyclopaedic embrace all the available knowledge of their disciplines. His *Thesaurus Eponymii Philatri* had met with a large and international success, and his edition of Galen had sealed his reputation as a philologist and a humanist. Haller's enthusiasm for an edition of letters that, he himself admitted, was not even a good one sounds all the more intriguing.

¹ "Gessnerianum epistolarum L III, Tiguri 1577. 4 edidit C. WOLFIUS, quae ad J. Cratonem, A. Gasser, Th Zwingger [sic] F Platerum B Aretium Ad Oconem, Holzachium J Fabricium &c datae sunt. Nullo studio procurata est haec aeditio, neque temporum ratio observata; valde tamen placent varietate, candore et eruditione, quibus undique plenae sint. Multa ad praxin faciunt et ad medicam historiam. Paracelsum et Phaedronem Paracelsicum, mitissimus homo aversatur," Albrecht von Haller, *Bibliotheca medicinae practicae: qua scripta ad partem medicinae practicae facientia a rerum initis ... recensentur*, Berne and Basle, 1776-78, vol. 2, p. 55.

There can have been several reasons (even if it is always tricky to read a reader's mind). The first one was the archaeological pleasure of tracing from epistolary remnants another man's life and thought, written on paper. For early modern authors, epistles were mirrors of the soul.² In them Haller saw, like many after him,³ the reflection of Gessner's frank and sweet character, but also his everyday life, his scholarly conversations with other important physicians, and a daily account of his actions and beliefs concerning two central elements of his life: his medical practice and his interest in natural history.

Besides their utility for drawing the self-portrait of a fellow-scholar, however, Gessner's letters certainly spoke to something more personal and intimate in Haller. A practising physician, a Swiss botanist, the author of several *Bibliothecae*,⁴ listing all the books dealing with medicine that had existed up to the end of the eighteenth century, and a lover of mountains and especially of the Alps, his own everyday life certainly resonated with Gessner's passion for plants, for medical experiments, for alpine excursions and for cataloguing immense numbers of books in his printed *Bibliotheca*. In the mirror, moreover, Haller not only saw a community of interests and of creations; he saw his own everyday life of letter writing and letter-reading, and the everyday presence of letters in his life. Since he was himself at the centre of an enormous correspondence network, such readings could only echo the problems and joys he found for himself in correspondence, the delays in receiving a long-expected letter, the anger at learning that a

² See W.G. Müller, 'Der Brief als Spiegel der Seele: Zur Geschichte eines Topos der Epistolartheorie von der Antike bis zu Samuel Richardson', *Antike und Abendland* 26 (1980), 138-157 and Judith Rice-Henderson, 'Humanist Letter Writing: Private Conversation or Public Forum?', in Toon Van Houdt et al. (eds), *Self-presentation and Social Identification. The Rhetoric and Pragmatics of Letter Writing in Early Modern Times*, Supplementa Humanistica Lovaniensia xviii, Leuven 2002, 17-38.

³ See Chapter 2

⁴ *Bibliotheca botanica qua scripta ad rem herbariam facientia a rerum initiis recensentur*, Zurich, Orell, Gessner, Fuessli, et al., 1771-1772, 2 vols., *Bibliotheca anatomica qua scripta ad anatomen et physiologiam facientia a rerum initiis recensentur*, Zurich, Orell, Gessner, Fuessli et al., 1774-1777, 2 vols., *Bibliotheca chirurgica qua scripta ad artem chirurgicam facientia a rerum initiis recensentur*, Basle, Schweighauser & Berne, Haller, 1774-1775, 2. vols., and *Bibliotheca medicinae practicae qua scripta ad partem medicinae practicae facientia a rerum initiis ... recensentur*, Berne, Em. Haller and Basle, Schweighauser, 1776-1788, 4 vols.

messenger had failed to deliver an epistle, and the happiness at opening a parcel sent by a remote correspondent.⁵ The main reason for the seemingly incongruous presence of letters in Haller's *Bibliotheca medicinae practicae* may well be that from the sixteenth century, they had assumed a crucial importance in medicine. Besides playing a major role in the intellectual exchange between scholars, in the framework of the Republic of Letters, they were also part of the everyday practice of medicine: consultations by letter and letters written on medical needs of the Canton constituted an important part of Haller's work, just like they had of Gessner's.

The mirror, thus, not only reflected a mind: it reflected a man caught in a wider context, and the vestiges were those of an age, as much as of a soul. Gessner's letters, Haller insisted, were useful for the history of medicine. Therefore, he proceeded not merely to write a summary of their contents, but also to review point by point his predecessor's main research accomplishments and the various contributions of the letter collection to general knowledge.

He did not admit the powers of precious stones and of gold. He did not approve of the studies which he saw at Montpellier. He used on himself vomiting when he was suffering arthritis. He gave oil of vitriol in cases of fever. He ordered Felix Wurz to open his temporal artery, because he suffered a very severe headache, with excellent results. He claimed that the *herba Paris* was an antidote against mania and haemorrhoids. He drank the thermal waters in Baden, whose use has fallen out of fashion. He tested the power of poisons on animals. He has experimented on the juice of Belladonna curing dysentery and calming pain. He preferred to cut the vein in the foot in cases of pleurisy. He cured Bullinger when he suffered from the plague, opening the buboes using fire and caustic medicines. Those who are bled in cases of plague all die, according to Jean Bauhin. He tested medicinal herbs on himself, and on dogs herb Paris, nux vomica, balsam seeds. By these means, he established the powers of many medical

⁵ An ongoing major project in Berne University (Berneer Haller-Projekt) is concerned with Albrecht von Haller's life and works. For details on Haller's life, see Heinz Balmer, *Albrecht von Haller*, Berne, P. Haupt, 1977. On Haller's correspondence, see the monumental *Hallers Netz, Ein europäischer Gelehrtenbriefwechsel zur Zeit der Aufklärung*, Martin Stuber, Stefan Hächler and Luc Lienhard (eds), Basle, Schwabe Verlag, 2005.

plants. He applied plasters against gout, containing euphorbium. In case of pleurisy, he prescribed linseed oil. He discovered the loch of *spina cervina*.⁶

Here, the core of Haller's critique was no longer about how Gessner's letters reflected another (or another's) reality. They ceased to be letters, written to particular persons at specific dates. Probably following his own reading notes, Haller fragmented letters into an enumeration of facts dissociated and isolated from each other (for what can be the common point between the fact that Gessner had not liked Montpellier University and the fact that he resorted to vomiting in order to cure his arthritis?). What Haller gave his readers was about knowledge, a knowledge changing slowly, in the course of the review, from details of Gessner's opinions and life, to details of his experience and experiments, and, finally, to general formulations of general and medical certitudes entangled with someone else's authority: "all those who are bled in times of plague died, according to Jean Bauhin", before coming back to individual, particular experience. If these facts were mostly presented as the result of Gessner's personal and particular experience, as well as of his actions, all references to the context, to the moment when the letter was written had disappeared. In the intimate space of scholarly letters, pushed to the foreground of medical literature by their hasty edition and publication, the great deeds of the town physician of Zurich, his amiable character, and his resemblance to Haller and to an ideal scholar, had become matters of fact: food for another's knowledge, oscillating between generalities and particulars. This dissertation focuses on this transition, using Conrad Gessner's letters, both manuscript and

⁶ "Lapidum pretiosorum, et auri vires medicas non admittit. Monspensulana studia, quae viderat, non valde probat. Vomitu se ipsum juit, cum arthritidem pateretur. Oleum vitrioli in fevribus dedit. Felicis Wurzio ob cephalalgiam maximam arteriam temporum jussit aperiri, optimo eventu. Herbam Parindem [Sic] antidotum esse repetit ad maniam et ad dolentes haemorrhoides. Badenses thermas bibit, qui utendi modus in desuetudinem abiit. In animalibus venenorum vim exploravit. Belladonae succum dysenteriam curare, Dolores tollere expertus est. In pleuritide venam in pede secare mavult. Bullingerus peste laborantem curavit, carbunculos igne et medicamento caustico aperuit. Qui in peste venam seuerant, eos omnes perisse, Johanne Bauhino teste. Herbarum medicatarum in se ipso experimenta fecit, in cane paridis, nucis vomicae, balsamines seminae [sic]. Ita multarum herbarum medicas vires per experimenta constituit. In ischiade emplastrum imposuit, quod euphorbium recipiebat. In pleuritide oleum lini propinavit. Eclegma de spina cervina invenit.", Haller, *Bibliotheca medicinae practicae*, p. 55.

published, as a case study, and perhaps a mirror. How did letters come to be at the centre of processes of elaboration of knowledge in the early modern period? And how did epistolary practices make it possible for scholars to answer the questions their time had raised about the nature and the value of knowledge?

Renaissance knowledge and doubts

For Haller, reading these letters in order to find matters of fact was certainly second nature. His training as a natural philosopher and as a physician had no doubt made him sensitive to the importance of gathering these facts, defined by historians as constitutive of early modern science. Since the pioneering works of Steven Shapin, Simon Schaffer, Lorraine Daston and Peter Dear,⁷ facts are now incorporated in most narratives and accounts of the Scientific Revolution. Defined as “nuggets of experience isolated from theory”, facts are closely associated by many historians with the philosophical works of Bacon and Boyle’s experiments, thus neglecting the role they may have played earlier, in the sixteenth century. However, for Barbara Shapiro, facts originated earlier, in the second half of the sixteenth century, in the discourse of law, as the deed or act of a man, which the judicial process had to declare was either true or false. Facts thus needed to be proved and acknowledged as such by a jury. For Barbara Shapiro, the concept of fact then expanded to other fields, including the circulation of news and natural philosophy, and created in England a real ‘culture of fact.’ Studies of the emergence of matters of fact have largely focused on the English Scientific Revolution. What happened in the rest of Europe, and especially in

⁷ See Lorraine Daston, “The factual sensibility”, *Isis*, 79 (1988), pp.452-467; Steven Shapin and Simon Schaffer, *Leviathan and the Air Pump, Hobbes, Boyle and the Experimental Life*, Princeton, Princeton University Press, 1985; Peter Dear, “Narratives, anecdotes, and experiments: Turning experience in to science in the seventeenth century” in Peter Dear (ed), *The literary structure of scientific argument: Historical studies*, Philadelphia, University of Pennsylvania Press, 1991, 135-163. Recently, in an interesting longue durée history, Mary Poovey, in *A History of the Modern Fact: Problems of Knowledge in the Sciences of Wealth and Society*, Chicago, University of Chicago Press, 1998, also suggested that the emergence of numbers was another way of interpreting and symbolising the emergence of the world of facts, focusing, for instance, on double entry account books.

German-speaking Reformed territories, remained largely unexplored. The problems raised by knowledge were, however, much larger and more extensively felt in the early modern period than hinted at by this focus on seventeenth-century English science.

During the 16th century, knowledge became a problem. A problem of scale, when the world was suddenly enlarged by discoveries overseas, but also when the number of things to know ceased to be limited to a “closed world” to become an “infinite universe.” Medical humanism, with its attention to Ancient Greek texts, enlarged, more than it replaced, the corpus of Arabo-Latin scholastic medical texts.⁸ It also became a problem of nature, when the understanding of the nature of knowledge changed. The repudiation of the scholastic method made description and empirical results more important and the individual and the particular more interesting, than before.⁹ Meanwhile, scholars remained, largely, formed by scholastic methods in universities inherited from scholasticism. Finally, with the use of the printing press and the increased circulation of news and books, knowledge became a material problem.¹⁰ How can one master an ever-expanding quantity of scholarly productions? Scholars devised complicated ploys to master the books, papers, and objects encumbering their studios, libraries, and museums.

These changes, however, were not straightforward. Nor had they erased former traditions, which continued to cohabit with other, more recent, ideas of learning. In the landscape of Renaissance elaboration of knowledge, one thought more in terms of tensions, between extremes and opposites, old and new, than in term of winners and losers.¹¹

⁸ See Vivian Nutton, “Greek science in the Sixteenth-Century Renaissance”, in J. V. Fields and F.A.L. James, *Renaissance and Revolution, Humanists, scholars, craftsmen and Natural Philosophers in Early modern Europe*, Cambridge, Cambridge University Press, 1993, 15-28.

⁹ Perhaps the most accomplished study of the role of empiricism in early modern knowledge is the collection edited by Nancy Siraisi and Gianna Pomata *Historia. Empiricism and Erudition in Early Modern Europe*, Gianna Pomata and Nancy G. Siraisi (eds), Cambridge / London, The MIT Press, 2005. See chapters 5 and 6.

¹⁰ See *Journal for the History of Ideas*, 62 (2004) Special Issue: Coping with Information overload.

¹¹ For an excellent summary of the changes in the understanding of knowledge during the sixteenth century, see Nancy Siraisi, *The Clock and the Mirror. Girolamo Cardano and Renaissance medicine*, Princeton, Princeton University Press,

This dissertation aims at examining how scholars confronted these tensions, and how they imagined new means of facing them, or seized more traditional devices to confront or accommodate them.

Renaissance knowledge in the making

In answer to these questions, historians have attempted to observe not only Renaissance ideas, but Renaissance making of knowledge and scientific and scholarly practices. Attention to material practices and history of the book has led to important results concerning the way people shaped, read, and appropriated the knowledge enclosed in books. Meanwhile, the study of museums and collections has shown how attention to the wondrous and unique pieces on display contributed to the emergence of the modern ‘matter of fact’.¹² Similarly, studies in the use of pictures or diagrams have shed interesting light on how this way of domesticating knowledge and of representing ideas and nature shaped the knowledge people had of nature.¹³

To these now traditional sources, some historians have added others that were intermediate productions of knowledge. Thus, in a recent and enlightening book on Renaissance natural history, Brian Ogilvie explored the processes of elaborating knowledge in Carolus Clusius’ notebooks and in Renaissance botanical drawings, especially the *Libri Picturati* and Conrad

1997, in Chapter 1 “Cardano’s Medical World, Introduction”, pp. 13-15. These were not so much radical changes, Siraisi notes, as evolutions: “Hence, although sixteenth-century medical faculties were, on the whole, remarkably receptive to change, change was much more likely to involve the incorporation of fresh elements than the abandonment of existing ones.” (pp. 13-14).

¹² On the role of printing in the elaboration of knowledge, see for instance Marina Frasca-Spada and Nicholas Jardine, *Books and the Science in History*, Cambridge, Cambridge University Press, 2000. For a general review on the role of Museums in elaborating the concept of facts, see Lorraine Daston, “The factual sensibility” (1988) who reviewed for instance works by A. Mac Gregor.

¹³ See for instance the collection of essays edited by Sachiko Kusukawa and Ian Maclean, *Transmitting Knowledge: Words, Images, and Instruments in Early Modern Europe*, Oxford, Oxford University Press, 2006.

Gessner's paintings. Through his readings, he described natural history knowledge as a 'Science of Describing', in which picture and notebooks became a condensate of experience.¹⁴

Another major space in the process and circuits of the elaboration of knowledge, letters represented, in the sixteenth century, first of all a link between people who sought knowledge. Moreover, they also constituted an intermediate and sometimes final product of this knowledge, although an ambiguous one. While they were reputed to be private, intimate conversations between scholars, early modern letters came easily into the public sphere, when they circulated among scholars or when printed collections of *Epistolae Medicinales* or *Epistolae Astronomicae* came into fashion.¹⁵ However, letters have remained unexplored by historians of science and ideas. Although many have admitted or claimed that correspondence was important to the advancement of science, few have gone beyond exploiting early modern correspondence as sources of biographical or anecdotal information, or as sources for the ideas and opinions of early modern scholars.¹⁶ Conrad Gessner's correspondence, in a way, never ceased to be what Haller had described: a collection of facts in which the historians picked out tales and narratives of incidental events.

In 1975, a colloquium in Chantilly, followed the year after by the publication of proceedings in the *Revue de Synthèse*, called for a new approach to correspondence in scholarly

¹⁴ Brian W. Ogilvie, *The Science of Describing. Natural History in Renaissance Europe*, Chicago, The University of Chicago Press, 2006

¹⁵ *Epistolae Medicinales* have recently been described by Ian Maclean as the "most obvious emanation" of the Republic of Letters in "The Medical Republic of Letters before the Thirty Years War", *Intellectual History Review*, 18 (2008) 15-30, p. 17. On *Epistolae Astronomicae*, see Adam Mosley, *Bearing the Heavens: Tycho Brahe and the Astronomical Community of the Late Sixteenth Century*, Cambridge, Cambridge University Press, 2007, who attempts to study Tycho Brahe's letters both in their manuscript and their published form, in order to show how letters entered in the processes of creating knowledge.

¹⁶ The literature on Conrad Gessner largely rests on this reading of correspondence. See for an edifying example: Huldrych M. Koelbing, "Ophthalmologisches b. Conrad Gessner (1516-1565)", *Gessnerus* 18 (1961), 13-21. Most of the works on Gessner and medicine are based on Gessner's epistolary claims that he was not a very good physician, or at least that his practice was scarce. As we shall see, the scarcity of this practice is relative, and Gessner's consultations by correspondence, the case narratives he included in his letters, suggest otherwise.

Europe.¹⁷ Paul Dibon suggested for instance using letters not only for the biographical information they gave us, but also for the insight into the “reverse” of history they authorised. Looking behind – examining not the “petite histoire” but the reverse of history – was thus a way to access the man, to reach the thoughts and ideas which had evolved into major movements of the history of science, and more importantly, to apprehend the context – for Dibon the Republic of Letters – in which knowledge had emerged. It was also a way into individual minds and reactions to a specific event: something the historian often has difficulty in grasping. Through letters, said René Taton, one could gain access to unknown influences, but also understand the circulation of knowledge and how new theories and scientific discoveries spread throughout Europe. Letters thus became for historians the missing link between the individual and the wider picture. Indeed, recent works on correspondence, which have multiplied in the last few years, have largely focused on the way in which the individual, through letters, found a place in a bigger context, either by combining a literary approach and the understanding of the rhetorical devices of letters in shaping social expectations and scholarly self-presentation,¹⁸ or by focusing on the social practices defined by epistolary exchange, and especially on the way letters shaped circles of knowledge, correspondence networks, and ultimately, a sixteenth-century Republic of Letters.¹⁹ In this work, I would like to contribute to this effort, by proposing an analysis of Conrad Gessner’s correspondence, an analysis combining attention to the literary and stylistic nature of letters, examination of how texts and editions were produced, and interrogation of scientific practices.

¹⁷ See *Revue de Synthèse*, 97 (1976), especially Paul Dibon, “Les échanges épistolaires dans l’Europe savante du XVII^e siècle”, pp.31-50 and René Taton, “Le rôle et l’importance des correspondances scientifiques aux XVII^e et XVIII^e siècles” pp. 7-22.

¹⁸ See for instance, in the lineage of Janet Gurkin Altman’s work, the studies on self-presentation exemplified by Toot Van Houdt and al., *Self Presentation and Social Identification. The Rhetoric and Pragmatics of Letter Writing in Early Modern Time*, Leuven, Leuven University, 2002. A more detailed literature review can be found in Chapter 2.

¹⁹ See Florike Egmond, Paul Hoftijzer and Robert Visser, (eds), *Carolus Clusius. Towards a Cultural History of a Renaissance Naturalist*, Amsterdam, Koninklijke Nederlandse Akademie van Wetenschappen, 2007 and bibliography in Chapter 3.

Historians and Gessner's correspondence

Gessner's correspondence has met with the same fate as that of most of early modern scholars and scientists. Although the rest of his works were submitted to close and often enlightening scrutiny by historians of science, his correspondence was generally used as a biographical and historical source, but rarely questioned. Perhaps the best and most striking example of this can be found in the commemorative issue of *Gesnerus*, published for the quatercentenary of his death in 1965. Papers dealt successively with several aspects of his work and life – his personality, his botanical and zoological achievements, his medical art, his illustrations, his *Liber amicorum*... – and largely drew out of his correspondence anecdotes to illustrate his thoughts and actions, but did not incorporate any paper dealing with the correspondence itself.²⁰ Only one article, as far as I know, written by Richard Durling in 1980, examined it, or rather, a small part of it, the 1577 *Epistolarum medicinalium libri III*.²¹ There, Durling highlights what these letters teach us about Gessner's humanist, botanical and medical practices: a freshness of character, which paralleled his innovations in botanical classification, and in experimenting with plants on himself (the best way to know their virtues) and on dogs. This interest in innovation, mitigated by the adhesion of Gessner to the most traditional features of medicine, designated the importance of the Swiss scholar for historians of science and medicine. The accent put on novelty, however, if it answers some of the problematics raised by early modern science, was mostly significant for Durling and his colleagues' interest in 'great men of science', the same heroes who had received Gessner among them.

²⁰ *Gesnerus*, 22 (1965). The full titles of the papers are given in the bibliography.

²¹ Richard Durling, "Konrad Gessner's Briefweschel" in Rudolf Schmitz and Fritz Krafft (eds), *Humanismus und Naturwissenschaft*, Boppard am Rhein, Boldt, 1980, 101-111.

Sources

Most of the interest manifested by historians in Gessner's correspondence saw it as the result of a commemorative effort, that is to make as much as possible available to posterity. His letters were published early, but only in part. Twelve years after his death in Zurich, a first collection, the *Epistolarum medicinalium libri III*, was edited by his scientific executor, Caspar Wolf. To these 209 letters (206 written, and 3 received by Gessner), one must add the *Epistolarum medicinalium liber IV*, a collection of 22 letters sent to Johannes Kentmann, and one letter addressed to Georg Fabricius. Published in 1584, this additional volume is now rare. Finally, in 1591, Caspar Bauhin appended to his publication of a botanical treatise of his brother Jean, *De raris et admirandis herbis...*, another 44 letters, mostly to Jean Bauhin the Younger, two to his father Jean, and one to Antoine de Raphael, a medical student born in Draguignan.²² To these sixteenth-century publications were added several modern editions of isolated letters, the largest of which was the eleven letters from the Trew Collection in Erlangen, mostly addressed to people in Nuremberg.²³ Making the texts of these letters available, however, has often discouraged scholars from examining the remaining manuscript letters: if several publications of Gessner's correspondence, with translations into the vernacular, have appeared, they have been translations

²² *Epistolarum Medicinalium Conradi Gesneri... libri III*, Zurich, Froschauer, 1577; *Epistolarum medicinalium Conradi Gesneri ... liber quartus*, Wittenberg, Simon Gronenbergius, 1584; *De plantis a divinis sanctisve nomen habentibus... Additae sunt Conradi Gesneri ... Epistolae hactenus non editae*, Basle, Conrad Waldkirch, 1591.

²³ See for instance: Gernot Rath, "Die Briefe Konrad Gessner aus der Trewschen Sammlung", *Gesnerus*, 7 (1950), 140-170. *Gesnerus*, 8 (1951), 195-215. See also: Ludolf Christian Treviranus, *Caroli Clusii Atrebatensis, et Conradi Gesneri Tigurini epistolae ineditae. Ex archetypis edidit, adnotatiunculas adpersit, nec non praefatus est*, Leipzig, L. Vossil, 1830; Henri Omont, "Une lettre de Conrad Gessner à David Chytraeus (1543)", *Centralblätter. für. Bibliothekswesen* 8 (1891), 122-123; Hans Fischer, "Ein unveröffentlichter Brief Conrad Gessners (1516-1565) an Johann Fabricius Montanus (1527-1566) in Chur", *Gesnerus* 3 [1946], pp.125-130; Charles Salzmann, "Ein Brief von Gerolamo Cardano an Konrad Gessner (1555)" *Gesnerus*, 13 (1956), pp. 53-60; Karl Heinz Burmeister (ed.), *Achilles Pirmin Gasser (1505-1577), Arzt und Naturforscher, Historiker und Humanist*, Bd. 3: Briefwechsel, Wiesbaden, 1975. Johann Caspar von Orelli, in "Der Briefwechsel zw. Conrad Gessner u. Henricus Stephanus": *Neujahrsblätter. der Stadtbibliothek in Zürich*, Zurich 1837, summarised the contents of Gessner's and Henri Estienne's Greek letters.

of the published *Epistolae medicales*. But almost 300 unpublished manuscript letters have survived, sometimes fragmentarily and are now kept for a large part in libraries of Zurich, Basle, and Paris. This does not exclude many other isolated letters, kept in other archives, and scattered through the necessities of correspondence because Gessner did not keep track of the letters he sent and, as we shall see, tore those he received to pieces. The existing unpublished and published letters cover the whole range of letter writing practices in the early modern period. Some are letters sent and received by Gessner and still bearing the seal; others drafts or copies of important epistles, sent sometimes to several different scholars. Others have already overcome several types of transformations: cut into pieces and pasted among their addressee's medical papers, their fragments (and occasionally a full letter) can be found in the manuscript of the *Thesaurus medicinae practicae*, up to now considered as a collection of Gessner's case notes and medicine recipes, or in his published books, the most important being the *Historia Animalium*. Some, now lost, nonetheless left a trace in the margins of his drawings and "*Handexemplar*" of his magna opera (*Historia Animalium* and *Bibliotheca universalis*), as well as in his marginal notes on the books he read. Although the main text of the letters was there lost, the track that remains helps us to understand how Gessner used his correspondence to prepare for new editions of his books or to solve problems he encountered in the everyday practice of medicine. This correspondence, with altogether 500 extant letters and 255 securely identified correspondents, might appear minor compared to that of other scholars of the time: Heinrich Bullinger, Erasmus of course, or even Carolus Clusius left much more material in archives. However, with the multiple layers of epistolary practice it presents, I hope to examine how letters shared, at various and often important moments, in the elaboration of a knowledge that accommodated both the general and the particulars.

Outline

The outline of this thesis thus follows the different moments of a letter's life, from its writing to its circulation and the epistolary dialogue it generated, then, once the letter had been answered, to what we might term its afterlife: when letters stopped belonging to a dialogue between correspondents and became objects of knowledge and material for knowledge.

Chapter 2 analyses the circumstances and context surrounding the reading and writing of letters: the man who wrote them, the codes of early modern letter writing and the material circumstances of epistolary exchange. It argues, however, that letters also shaped this context, and attempts to examine the role letters played in Gessner's life, or rather lives. A man with multiple projects and multiple activities, he wrote letters all his life, and all the time, pouring into them feelings and stories, gambling with his future and his fame. This chapter briefly reconstructs his life, while questioning Renaissance epistolary culture, and the way it shaped this life. Letter writing was not a mere question of using a pen and paper: strictly framed by social and literary rules, it proceeded from early mechanisms of self-presentation, one that carried the image of the author throughout the whole scholarly Europe. But social conventions were not the only constraints on Gessner's epistolary life: material contingencies shaped epistolary practices as surely as the rules of scholarly society. This chapter attempts to explore this epistolary practice and to establish the bases and circumstances in which letters could take part in the elaboration of knowledge, and to demonstrate that the material constraints defined a specific epistolary dialogue.

The aim of this dialogue was, first of all, to promote or even just to make possible the exchange of information. Chapter 3 will thus focus on the exchange of information and objects made via letters around Gessner and examine his correspondence network. In the framework of a nascent Republic of Letters, Gessner's correspondents operated by the means of a series of ties

that involved collaboration in reaching information, which was always located and often difficult to attain. But these ties recreated a map of scholarly and medical Europe, based on common past and projects, a community in which rules of exclusion and inclusions often corresponded to the way individuals understood exchange.

As letter exchange was highly dependent on circumstances, this exchange of natural samples, books, and objects carried within or together with letters was sometimes difficult: the necessity of giving something was then met by another means: the sending of news. Chapter 4 examines the transformation of consultations by letter, one of the basic medical acts of the time, into case narratives, and shows how Gessner drew on his everyday medical life to construct news, i.e. sendable items, standardised and therefore easily reusable, a notion important, as we shall see, for him. However, if he collected and distributed news, it was not for the simple pleasure of having it: collecting news was part of a larger enterprise, one that aimed at an encyclopaedic knowledge, a knowledge of the general made of particulars.

This enterprise, in itself, raised questions for Gessner and his colleagues. Chapter 5 will examine how he and other learned physicians questioned what they were doing: trying to establish knowledge, at a moment when the very nature of this knowledge was challenged: was it a general knowledge of causes? A knowledge of particulars? For the changes I have underlined in the beginning of this introduction were, as Nancy Siraisi pointed out, progressive: scholastic models and humanist contentions struggled against questions of truth and of certitude, and the possibility of knowledge in itself was questioned. Chapter 5 examines these struggles, and attempts to show the role of letters in negotiating new questions, in articulating the general and the particular and in shaping a new place for news in this early modern knowledge of nature and of medicine. The epistolary dialogue, by shaping life into news, and news into matters of fact, products of individual experience attempting to explain not why, but how things worked, thus contributed radically to the elaboration of the material for knowledge.

Letters, once the dialogue had ceased, continued to play a major role in the elaboration of knowledge. Once he had answered his letters, Gessner cut them into pieces, then pasted them on other supports. By analysing several of these new lives for letters, from the use of pictures to the insertion of testimonies in treatises or to the accumulation of case notes, recipes and letters in the *Thesaurus Medicinae Practicae*, Chapter 6 questions the very epistolary material of Renaissance knowledge. Chapter 7 turns towards another afterlife of the letters: by analysing the process of the publication, in 1577, of the *Epistolarum Medicinalium libri III*, it attempts to show the extent of letters' incorporation in an early modern epistemological setting. Their gathering according to the same networks as any collecting enterprise, their publication in the frame of a genre of medical publications in full fashion, and the editorial modification this genre imposed upon the initial letters written by Gessner all indicate the importance of letters in the elaboration of knowledge.

CHAPTER 2: GESSNER'S LETTERS IN HIS LIVES

Introduction

In the sixteenth century, letters came to occupy a large part of people's lives*. Books of letters were published, and Secretaries, or *artes dicendi*, circulated widely among the population. Merchants exchanged letters in order to organise their business, and women from elite society contributed to the current of correspondence that overflowed Europe in the early modern period.²⁴ Postal services flourished. In recent years, scholarship has seized upon this growth of correspondence and erected it into a wider "epistolary culture".²⁵ This phrase, however, generally applies to the ensemble of norms ruling over letter writing, and therefore over letter-reading. Early modern letter writing may well appear to modern readers and historians as excessively normative. However, letters were not merely the products of norms, nor were knowledge and science merely the product of social or philosophical rules. Letters, just like knowledge, pervaded every moment of people's lives.

* Parts of this chapter were presented to audiences at the Colloque International Sciences et Ecriture, Besançon 2004, at the Wellcome WIP seminar, London 2005.

²⁴ Studies on correspondence deal with a huge variety of social backgrounds, from merchants to women, from scholars and Reformers to priests or emperors. See for instance Iris Origo, *The Merchant of Prato, Francesco Di Marco Datini: Daily Life In A Medieval Italian City*, Jonathan Cape, London, 1957 ; Lisa Jardine *Erasmus, Man of Letters: the construction of charisma in print*, Princeton University Press, Princeton-Chichester, 1993.

²⁵ See Adam Mosley, Nicholas Jardine and Karine Tyjberg, "Epistolary culture, editorial practices, and the propriety of Tycho's Astronomical letters", *Journal for the history of astronomy*, 34 (2003), pp.421-451.

This was, perhaps, even truer of Conrad Gessner's life. A town physician, a scholar, he resorted to letters at every moment of his different careers. In this chapter, I will try to assess how these letters fitted sixteenth-century epistolary culture, or rather, how sixteenth-century epistolary culture fitted into his everyday life, or rather lives.

Gessner played a variety of roles in his lifetime, and it has proved very difficult to see it as a unified, global *cursus*.²⁶ In the first section, I will give a brief overview of his biography.²⁷ Most of the available sources are indeed letters. Like many of his literate contemporaries, Gessner spent a large portion of his time writing them. They recounted the stages of his life, from his early youth, when he was petitioning for stipends from the state, to his maturity, when letters were a way to achieve big naturalist projects and to pursue a career as a town physician in Zurich.

They were also, as we shall see, a space where he was accounting for himself to others – his peers or his masters, those he wanted to convince of his value, in order to obtain money or samples of plants, protection or stories. This made letters a place where Gessner had to define himself: a promising student, a worthy town physician, teacher and

²⁶ This also applies to other early modern scholars and caused important problems to biographers. In Gessner's case, almost all biographies attempted to distinguish between his medical, botanical and zoological activities, his religious practice, and his theological or humanistic publications. Gessner's life was often conceived as a series of projects: the *Bibliotheca universalis*, the time of the *Historia Animalium*, the final period of the *Historia Plantarum*. This kaleidoscopic way of seeing him gave us a fragmented image of Gessner. The best example may be the commemorative edition of *Gessnerus*, 22 (1965), that collected papers dealing with the various aspects of Gessner: as a man (his personality), a physician, a zoologist, a correspondent, a bibliographer and encycopaedist, a botanist, and a theologian.

²⁷ A number of biographies of Gessner were published from the year after his death (Josias Simler, *Vita Conradi Gessneri*, Zurich, Froschauer, 1566) to our days. Perhaps the most significant are Johannes Hanhart, *Conrad Gessner. Ein Beytrag zur Geschichte des wissenschaftlichen Strebens und der Glaubensverbesserung im 16. Jb.*, Winterthur, 1824; Willy Ley, *Conrad Gessner. Leben und Werk*, Munich, 1929; Hans H. Wellisch, *Conrad Gessner. A Bio-Bibliography*, (Journal of the Society for the Bibliography of Natural History 7/2) 1975; and Lucien Braun, *Conrad Gessner*, Geneva, 1990.

scholar, i.e. someone who could, and would, become a learned physician, or, later, a learned physician sufficiently established to be a worthy correspondent.

Letters were not, however, mere products of the self: they were shaped by sixteenth-century culture, a culture in which they played such a major role. What Gessner's letters show us is also a man caught in the rules of this epistolary culture and having to compose with the scholarly necessity of devoting time to letter writing, coping with the frequent interruptions imposed by letters on scholarly communication, and making do with the methods of reading and writing. How all these elements of learned epistolary culture shaped knowledge is the subject of this chapter. How Gessner, as an individual, dealt with what he thought letters and knowledge were, is also at the centre of our preoccupations.

Section 1: A life in letters

The training of a learned physician (1516-1541)

In 1530, the fourteen-year old Conrad Gessner wrote to Zurich's religious and political head, Ulrich Zwingli²⁸:

As you know very well, very dear Zwingli, my affairs are in the best state. May God grant that they stay the same for a long time. "I have everything, yet have nothing, and although I possess nothing, of nothing am I in want."²⁹

This letter, full of humour, witticisms and irony, came from the son of a poor *Bürger* of Zurich. The child had been sent to live with an uncle of his, and then noticed by one of his teachers, Johann Jakob Ammann, who took him under his wing, taught him Latin and

²⁸ All biographical details of Gessner's correspondents may be found in Appendix II.

²⁹ "Nolo te fugere, charissime Zwingli, res meas optimo in statu esse. Deus faxit Opt. Max diu eas sic praeducare. Omnia habeo, nec quicquam habeo, nihil cum est, nihil desit tamen." Letter dated 6 November 1530, Staatsarchiv Zurich Ms VIII, 372. Gessner quotes from Terence, *Eunuch*, 243

Greek, and obtained a place for him at the Grossmünster, an ancient convent transformed into a school in Reformed Zurich.³⁰ This short missive was proof in itself that the young Conrad knew how to use the protection that the Council of Zurich had already bestowed upon him. It subverted, with an abundance of quotations, including that from Terence, the model of the petition letter advocated by “*ars epistolaris*” books and displayed with facetiousness³¹ the full virtuosity of a promising humanist.³² Apparently, it impressed Zwingli favourably, as its author quickly received the very stipend he was asking for.

Admittedly, had not Gessner been so well protected by local humanists and especially by his teachers at the Grossmünster, Oswald Myconius, Johann Jacob Ammann, and Rudolf Collinus, Zwingli might have thought twice about giving him the studentship. However, the epistolary display of his humanistic skills certainly helped to decide the matter. That so much of Gessner’s life could depend on his ability to write letters, at so young an age, seems today a little surprising. He had however largely benefited from the benevolent support of the city and was here, as was normal, asked to account for the good

³⁰ Wolfgang Rother, “The teaching of philosophy at Seventeenth-Century Zurich”, *History of Universities*, XI (1992), 59-74, gives a brief overview of the funding of the Grossmünster School, or *Carolinum*. See also Mark Taplin, “Switzerland” in Andrew Pettigree, *The Reformation World*, London New York, Routledge, 2000, 169-189.

³¹ Humour has been totally neglected in Gessner’s biographies. All the stress has been put on Gessner’s seriousness and eagerness for learning. Wit or ability to laugh have been erased from his statue. While I am not arguing for a jocular Gessner, always up for a laugh, several of his letters refer to jokes, even if they are learned jokes, and even once to a parchment of jokes circulated between scholars. See for instance, letter to Gasser, 19.03.1564, *Ep. Med.*, f. 34v, “Facetiam tuam de suibus et vicinis vestris risi.” And letter to Johannes Fabricius Montanus, 23.10.1562, ZBZ MsC50a41.2: “Mitto et do chartaceos ludos, exemplaria bina, in minima forma, unum tibi, alterum D. Pontisellae. Abundant enim mihi. Complures ex Italia accepi. Si nihil aliud, ridebitis saltem.”

³² For definitions of the “petition letter” (*petitoria epistula*), see for instance: Erasmus, *De conscribendis epistolis*, 52; J. L. Vives, *De conscribendis epistolis*, Antwerp, M. Hillen, 1534, § 15: “Itaque illa vera est et germana epistola per quam significamus alicui id quod in negotiis vel ejus interest scire vel nostra, quales sunt propemodum nuntiatoriae, petitoriae, commendaticiae, consultoriae, admonitoriae et si quae sunt ejus generis quae vicem absentiae scribentis impleant.” Gessner himself, in the *Pandectae*, assimilated letters of petition and of recommendation (*Pandectae*, De grammatica, XVIII, 34r-36v).

use of the money and goodwill of the Fathers of the town Council. An important part of the training of young scholars from an early age, letter writing was considered to help students to find their own style, and therefore an essential part of humanistic training.³³ Giving Zwingli this letter was thus as good as giving him an essay, or another written proof of his progress.³⁴ It demonstrated good command of Latin and of classics and showed that Gessner could not only imitate Ancient models, but also subtly subvert them by his wit and irony.

The young man soon left Zurich for Strasburg, where he assumed a position of *famulus*³⁵ in Wolfgang Fabricius Capito's house. In exchange, the master would teach him Hebrew. Gessner, according to letters to various people in Zurich, was disappointed at how little time he had to devote to his studies among his many other obligations. Therefore, he soon wrote a letter to Zwingli's successor, Heinrich Bullinger, and obtained leave – and a new stipend – to travel to France and to Bourges in 1533. Interestingly, we have many more letters by the young Gessner from these few years than from the

³³ As we shall see in the next section, Claude La Charité, in *La rhétorique épistolaire de Rabelais*, Québec, editions Nota Bene, 2004, highlights the central pedagogical role of letters in humanist training, and especially that of *artes dictaminis*. An attempt at a comprehensive study of *artes dictaminis* and at an understanding of their role, especially in forming the style of humanists, can be found in Carol Poster and Linda C. Mitchell (eds) *Letter writing Manuals and Instruction from Antiquity to the Present*, Columbia, University of South Carolina Press, 2007 and R. W. Witt, *In the Footsteps of the Ancients: The Origins of Humanism from Lovato to Bruni* (Leiden, 2000). Letters remained a central part of the learning of humanist trade even after students had left school: employed as amanuenses, students used to copy down the letters of their master, and sometimes to redact them, a hands-on approach to the techniques of letter writing.

³⁴ Gessner himself maintained this practice later, when he asked his own 'disciples', Caspar Wolf or Georg Keller, to send him some proof of their progress he could show to Bullinger, thus justifying his interest in them, and the stipend they were receiving from the state.

³⁵ On the role of students in humanistic households, see Gadi Algazi, "Scholars in Households: Refiguring the Learned Habitus, 1480-1550", *Science in Context*, 16 (2003) 9-42. On Wolfgang Capito and his circle, see *Reformation Sources: The Letters of Wolfgang Capito and His Fellow Reformers in Alsace and Switzerland*, ed. Erika Rummel and Milton Kooistra (Toronto, 2007) and *The Correspondence of Wolfgang Capito*, ed. and transl. Erika Rummel, I (Toronto 2005).

following ones.³⁶ They described to Oswald Myconius, Bullinger or other well-placed local patrons, both his studies and his surroundings, the political and social situation around him, and any other news his masters might find interesting. Thus mixing the testimonial role of the academic “work in progress report” and the diplomatic information system, Gessner’s letters maintained him within the student circles, but at the same time, trained him for the new role, assumed by humanists in Reformed Zurich, of a man destined to a *vita activa*, able to assess a political situation.³⁷ The quest for patronage and academic positions involved a number of diplomatic proceedings, and Gessner, like other students, was perfectly aware of it.

Besides this training to be an ‘informant’, the young man also learned other, more basic skills. His position near Capito, although unrewarding, certainly put him into contact with a buzzing humanistic world in the city.³⁸ It also helped him establish a form of intimacy with Wendelin Rihel, to whom he gave Greek lessons. Rihel was at that time acting as a librarian in Strasburg, and would soon become an important printer in the city. Leaving for Bourges, then a leading university³⁹ in France, Gessner, who had joined his friend Johannes Fries, found the lectures of Melchior Volmar a good way to improve his Greek. The year after, he went to Paris. According to his *Bibliotheca universalis*, he dated from his sojourn in this city an important broadening of his interests, under the guise of a

³⁶ I have found fourteen letters written by Gessner during his first *peregrinatio academica*, between 1532 and 1536. From the following period, including the period when he taught in Zurich and when he occupied the Chair of Greek in Lausanne, i.e. between 1537 and 1540, we have only three letters, even though Gessner had some leisure and was certainly able to correspond with his Zurich patrons.

³⁷ While Gessner did not choose this career, one of the students he wrote to, Hans-Wilhem Stucki, did.

³⁸ On Strasburg in the Renaissance, see Miriam Usher Chrisman, *Strasburg and the Reform: a study in the process of change*, New Haven, Yale University Press, 1967.

³⁹ On Bourges University during the period, see for instance Marie-Claude Tucker, *Maîtres et étudiants écossais à la faculté de droit de l'université de Bourges : 1480-1703*, Paris, Honoré Champion, 2001.

neglect of “serious studies”, such as philosophy and other serious arts.⁴⁰ His studies in Greek and his random reading gave him the usual profile of a humanist, while definitely diverting him from the standard career of students in the Carolinum: theology and pastoral duties. When he left Paris and the religious persecutions against Reformers initiated by François I, he went back to Strasburg where he stayed with Martin Bucer and wrote to Bullinger to inform him of the situation.

He apparently stayed there for a while, for, in May 1535, he wrote to Heinrich Nüscheler a letter which, instead of informing his reader of his progress and ensuring his future prospects, surely spoiled them: he announced his marriage to a beautiful young lady.⁴¹ The bright future of the promising Gessner was immediately clouded. With a wife to support, he could not live on the studentship he received, and it seems that Zurich authorities were extremely angry at this rash move. It was not, admittedly, the custom for humanists to marry, and especially to marry so young (he was not yet twenty). Studies came first.⁴² Bullinger found however a job for the reprobate: teaching grammar in an elementary school, with a salary amounting to the stipend he had received for his studies. This has been, over the centuries, read as a punishment inflicted on Gessner. No proof of this can exist, but it is clear that, at this point, he was pulled back down the academic ladder, much further back than his substantial training in Latin and in Greek and his basic knowledge of Hebrew should have guaranteed. He was not, however, in this difficult position for long, as he obtained another stipend for the year 1536, in order to study medicine in Basle. Medicine was a common choice among people of Gessner’s standing, who registered for a

⁴⁰ *Bibliotheca universalis*, Zurich, Froschauer, 1545, f. 180r. Interestingly, this gave way, in the BU, to a warning against curiosity to younger readers precisely when curiosity was becoming an element of Gessner’s self-presentation, and one biographers have enhanced over time.

⁴¹ UBB MsG2I17, 1, 10-11.

⁴² In spite of this early experience, Gessner always seemed overjoyed at the prospect of his younger correspondents’ weddings. He thus congratulated heartily Theodor Zwinger on his marriage, (*Ep. Med.*, f. 106r) and strongly advised Jean Bauhin to choose a wife. (*Epistolae*, 1591, f. 151)

medical degree after they had obtained the M.A. While the income could remain low (and it did so for him for years), it ensured an income, and one that could increase with time, a serious consideration for the cash-strapped Gessner.

However, his medical studies were soon postponed when he obtained a position to teach Greek at Lausanne's brand new University in 1537.⁴³ There, he began works on medicine and on botany, and published a compendium of Actuarius, as well as translations of Greek works on *Physica*. In exploring the area near Lausanne, Gessner also collected the material for several of his early botanical treatises, and especially for the *Historia Plantarum*.

Despite his exile to Lausanne, his patrons in Zurich had not forgotten him, and obtained for him another, new and better stipend to return to his medical studies. He actually left for Montpellier, one of the most famous medical faculties in Europe, in October 1540. He did not, however, register there, although he attended Guillaume Rondelet's lectures on botany and Laurent Joubert's anatomical demonstrations. But he quickly obtained his medical degree the year after, in 1541, in Basle.

Gessner's second *peregrinatio academica* was thus much shorter than the first one, and in a sense more satisfactory, as he ended up not only with a title of *Doctor medicinae*, but also with an already significant collection of plants, collected during his stay in Lausanne, Montpellier, and Basle. Although he had not travelled very far,⁴⁴ this collection would provide the material for several of his publications, including in 1541 his *Historia*

⁴³ Biographers have usually read this new position as an exile, a punishment for the undesired wedding. But, considering the number of young humanists in Germanic countries, getting the position in Lausanne should have been the result of difficult negotiations between local authorities and Gessner's patrons. If it was a punishment, it was one that probably cost its authors much effort. An account of the recruitment process of professors in Italian Universities can be found in Paul F. Grendler, *The Universities of the Italian Renaissance*, Baltimore and London, The Johns Hopkins University Press, 2002, p159sq.

⁴⁴ Compared with Pierre Belon, or Carolus Clusius, for instance.

Plantarum.⁴⁵ This education had installed Gessner cosily in the world of academic, scholarly, and medical institutions. It also enabled him to establish a network of colleagues and potential addressees for dedications, coming from the same institutions, having studied with him, or taught him. While this network involved constant maintenance, it also represented, for a scholar without a familial tradition of scholarship or medicine, the possibility to create it more or less from scratch.⁴⁶

1541-1554: Getting in

In 1541, Gessner returned to Zurich to teach the *Professio physica* in the *Grossmünster*.⁴⁷ It was not, however, a full professorship, but a position as a *studiosus stipendiatus*, lower on the university career ladder and on the pay roll. He there taught several subjects (mathematics, ethics, physics, philosophy, and astronomy), all of which were minor courses

⁴⁵ Whether the *Historia Plantarum* established Gessner's European name, or whether earlier publications earned him renown, it is very clear that, by the time when he published the *Bibliotheca universalis*, he had already established strong relationships with many scholars in Europe. Indeed, the *Bibliotheca universalis*, in 1545, already contains several letters from Gessner's correspondents.

⁴⁶ We have practically no letters remaining from this period of Gessner's life, although he was away from Zurich and most probably intent on corresponding with those he had left behind. The ways networks were inherited in the sixteenth century deserves a study. For many of Gessner's younger correspondents, correspondence networks were a heirloom: Adolf Occo, Theodor Zwinger, or Felix Platter actually inherited their parents' network. Was it a matter of generation (they belonged to the next generation) ? Or was Zurich's context specific? It is interesting to remark that several generations of town physicians in Zurich later, Johann Jakob Scheuchzer (1672-1733) still had a correspondence network geographically similar to Gessner's. See Michael Kempe, "Postalische Kommunikationen des Johann Jakob Scheuchzer", *Gesnerus*, 61 (2004), 177-197.

⁴⁷ This is a token of Zurich's aim of following Erasmus' plans for a university cursus, by adding, to the usual theological studies, a cursus in mathematics and natural philosophy (cf Bernhardt Milt, "Zurichs Vergangenheit in Naturwissenschaften und Medizin (MittelAlter und 16. Jahrhundert.)" *Gesnerus*, 4 (1947) 19-43). According to Lucien Braun, *Conrad Gesner* (Geneva, 1990), p. 154, Gessner only obtained this appointment in 1546. However, Braun does not mention his sources on this point.

compared to theology.⁴⁸ It was, however, a steady income, and added to the revenues of his new practice as a learned physician in Zurich.

This return to Zurich, however difficult it might have been in the beginning, was a major step in Gessner's life: this second academic position was also his last. From the moment he returned to his hometown, he stopped moving. Except for a couple of short trips in the early 1540's, he had found his place, and knew it. A trading city and the crossing point of the main routes throughout Europe, Zurich was a lively place, but certainly not a major centre for medicine, knowledge or patronage. If printers, like Christoph Froschauer, or Gessner's relatives Andreas and Jakob Gessner, were many and active, getting hold of a position in Zurich was certainly not the best move towards a perfect and high-flying scholarly career. The chances of getting hold of a courtly position near a king or a prince were extremely low, as were, therefore, the odds of getting time and money enough to pursue his course of study. Staying in Zurich was a choice that engaged most of Gessner's subsequent life because it made him a man of his own means – in a way.

His beginnings as a learned physician were apparently difficult, and his comments on his own medical practice constantly disparaging. Not that he considered himself a bad physician. But he complained of the huge competition between physicians,⁴⁹ to say nothing of barbers, surgeons, etc.⁵⁰ He also criticised the tardiness of patients in attending consultations or their insubordination. If most of them came in person to him, many clients he only met through letters. Epistolary consultations represented a means of

⁴⁸ The practice of paying teachers according to the importance given to their courses was common in the 16th century.

⁴⁹ Letter to Holtzach, [2 April], *Ep. Med* f. 87r.

⁵⁰ This diversity of the medical bodies typical of the early modern period was not hampered by the numerous regulations instituted in Zurich to put them to order. The idea of professional physicians, or learned physicians, seems well established; however, it did not guarantee that the learned physicians would have a career in Zurich. On Zurich medical bodies in the early modern period, see Gustav A. Wehrli, *Die Krankenanstalten und die öffentlich angestellten Ärzte und Wundärzte im alten Zürich*, Zurich, Gebr. Leeman, 1934.

reaching a new clientele and of spreading his good name throughout the neighbouring Cantons of Switzerland. A space for self-presentation, they inserted him in a local Zurich network, and in a wider clientele of Helvetians.

Gessner's first scholarly accomplishments were hardly likely to earn him the kind of local fame that would draw potential paying clients to his private practice. In 1545, his first big-scale project appeared in print: the *Bibliotheca universalis* immediately received very positive feedback. It also represented years of patient, lonely reading. More than 16000 books were there, classified by author, reflecting the changes in the reading practices of the sixteenth century.⁵¹

Thus, throughout his first years as a practising physician, Gessner kept close contact with his original scholarly world. The correspondence network met with a radical change: instead of writing home, the new physician began sending letters abroad. By the time he published the *Bibliotheca universalis*, he belonged to the correspondence networks of several important scholars he had either met during his studies, or contacted through his local elders: Heinrich Bullinger or Christoph Clauer, for instance. Joachim Vadianus, Theodore de Bèze, and Boniface Amerbach exchanged letters with him. Many others partook of his self-improvement strategy by accepting the dedication of Gessner's books. Several surviving letters were in fact *epistolae dedicatariae*: Pierre Viret and Diego Hurtado a Mendoza both received one in 1542 and 1545.⁵² Other dedications went to political forces, such as members of the Zurich Council⁵³ or the Consuls of Berne,⁵⁴ in order to guarantee that

⁵¹ See for instance Roger Chartier, "Libraries without walls", *Representations*, 42 (1993), pp. 38-52.

⁵² *Moralis interpretatio errorum Ulyssis Homeric commentatio Porphyri*, Zurich, Froschauer, [1542] and *Lexicon Graecolatium*, Basle, 1545 (3rd edition).

⁵³ Gessner's edition of Martial, (*M. V. Martialis poetae facetissimi epigrammata*, Zurich, Froschauer, 1544) and his *Onomasticon propriorum nominum...*, published with the reedition of Calepino's *Latinae Linguae Dictionarium*, Basle, Hieronymus Curio, 1544.

⁵⁴ *Κέρας Αμαλθίας. ΙΩΑΝΝΟΥ ΤΟΥ ΣΤΟΒΑΙΟΥ ΕΚΛΟΓΑΙ ΑΠΟΦΘΕΓΜΑΤΩΝ*, Zurich, Froschauer, 1543.

some money would be spent on Gessner's research projects. He had plenty of occasions for showing his appreciation. While he worked full time on his *Bibliotheca universalis*, the ensuing volume of *Pandectae*, and his medical practice, he also spent the rest of his waking hours preparing bread and butter publications. Between 1541 and 1549, he published over twenty shorter essays, collections or translations of Ancient authors. Several were intended for students, like his edition of the *De Medicamentorum Compositione* of Actuarius, translated by Ruel, to which he attached a table of substitute remedies, or *compendia* of ancient and modern authors on natural philosophy or medicine.⁵⁵ Others were translations or editions of Ancient texts. He thus published the complete works of Galen, the *Scholia to Aristotle* of Michael Ephesius, and works of Heraclides.⁵⁶ In spite of his geographical stability, Gessner thus maintained strong relationships with both the most important adjuvants in the race to humanist honours: printers and princes.

Thus, in 1545 he wrote to Boniface Amerbach, a jurist in Basle:

I have received your letter and that of Anton Fugger, very erudite Amerbach, and I am, I admit, greatly indebted to you for this sort of service. And so you do not wonder what business I have with such a great man, just know that he recommended me in his letter to his relatives in Antwerp and Gdansk, if I go there next spring, if God grants me life, for the purpose of my *Historia Animalium*, which I intend to do if nothing else happens. I write these things happily to your kind self, so that you will understand the reason for my studies and judge me worthy of

⁵⁵ For instance, he corrected Ermolao Barbaro, *Naturalis scientiae totius compendium*, Basle, Oporinus, 1548, or earlier, the *Compendium ex Actuarii Zachariae Libris*, Zurich, Froschauer, 1541.

⁵⁶ The importance of these bread-and-butter publications in the landscape of early modern printing world deserves a study in itself because it reflects a the relationship between printers and authors, and also the importance of minor genres in finding an audience for bigger, more important books. Just as Gessner earned his return to Zurich by preparing his Greek-Latin dictionary, many other humanists and physicians established their reputation on bases that were not their main professional calling, or even the specialty of their university training.

being helped in promoting them, if something useful arises now or later in relation with this design of mine.⁵⁷

Here, the recommendation letter has a double function. Its addressees in Northern Europe as well as its carrier from Basle found themselves coerced into giving a hand both by the genuine frankness of their correspondent and by the wish of the powerful Fugger. The contact with the extremely influential Fugger family, especially after the publication of the *Bibliotheca universalis*, hints at Gessner's growing fame. He was a rising star in the scholarly firmament, one whose medical abilities were, in some ways, less important than his scholarly achievements. Indeed, he sought their patronage himself.⁵⁸ In July 1544 or 1545, Johann Jakob Fugger offered him a job as tutor of his children and nephews, with responsibility for his library, a good salary – he did not, at the time, have the position of town physician, and his medical practice still seemed weak – and a long trip to Italy with the Fugger children, as well as two rare and important things: time for writing and access to the extremely wide reach of the Fugger family.⁵⁹ The offer was finally declined out of religious motives (the Fugger family was Catholic and Gessner might have feared the need

⁵⁷ “Redditae mihi sunt literae tuae et Antonii Fuggeri, doctissime Amerbachi, pro quo genere officii plurimam me tibi debere fateor. Et ne forte mireris quid tanto viro negotii mecum sit, scias me per literas ejus commendari famulis suis Antverpiae et Dancisci, si forte illuc proficiscari ad proximum ver, vitam largiente Domino, historia animalium gratia, quod facere proposui si nihil aliud incidat. Haec libentius ad humanitatem tuam scribo, ut studiorum meorum rationem intelligas, ac in eisdem promovendis, si quid vel nunc vel alias huic instituto meo commodum occurrat, adesse mihi digneris.” Gessner to Boniface Amerbach, 18 November 1545, UBB KiAr18a 2, 188.

⁵⁸ That he resisted them seems to have been, for him, a claim for merit. See the Gessner-Mattioli controversy, below, pp. 56-60.

⁵⁹ Franz Herre, *Die Fugger in ihrer Zeit*, Augsburg, Wissner Verlag, 2005 and Götz von Pölnitz, *Die Fugger*, Tübingen, Mohr, 1999. As for the Fugger, Gessner several times referred to them as his patrons. He for instance dedicated his edition of Aelianus to Johann Jakob Fugger in 1556 *Claudii Aeliani.... Opera quae extant, omnia*, Zurich, Gessner brothers, 1556.

to convert), sheer love of his hometown and sense of his duties towards it, or other, more obscure reasons.⁶⁰

Gessner's constant flow of books equally involved close relationships with printers in Zurich and Basle, where he published his works alternately. It helped to make him a productive, and therefore valuable, author and editor, one who contributed, besides his bigger projects, to many smaller sales. Some books, like the *Thesaurus Evonymi Philatri*, reached a growing audience, so as to become best sellers translated into various languages.⁶¹ Moreover, he was not only an author, but also an excellent client, because an avid reader, as his accounts at Froben's bookshop show.⁶² He thus maintained, throughout his life, good relationships with printers, travelling for instance with Christopher Froschauer to the Leipzig fairs or preparing his catalogue in 1543.⁶³ His books travelled with their mail, and he maintained correspondence with the most important printers of the area. Nicolaus Episcopus informed him, for instance, in 1553, of the state of his editorial projects

⁶⁰ The reconstitution of this period of Gessner's life depends mostly on the narrative of Johannes Hanhart, whose quotations are notoriously inexact, and who, in the spirit of nineteenth-century biography, attached sometimes more importance to the psychological truthfulness of his narrative than to source quoting. Hanhart and later historians reported two other offers Gessner would have refused. Augsburg physician Seiler suggested he could establish his medical practice in Augsburg and Bishop Hooper invited him to be his personal physician in England. (See Wellisch p. 10).

⁶¹ To the best of my knowledge, the difficult task of assessing the success of Gessner's publications has yet to be undertaken. Laurent Pinon, in his thesis soon to be published, *Les livres de zoologie de la Renaissance: objets de mémoire et instruments d'observation (1460-1605)*, made a first attempt concerning zoological publications, but the rest of Gessner's publications remained unexplored.

⁶² *Rechnungsbuch der Froben & Episcopus, Buchdrucker und Buchhändler zu Basle, 1557-1564*, Vaduz, Sändig reprint Verlag, H.R. Wolhwend, 1985.

⁶³ *Index librorum quos Christophorus Froschauer Tiguri hactenus suis typis excudit*, Zurich, 1543. This did not prevent him from complaining several times of his printer's lack of care in their publications. See for instance Gessner to Occo, 27.08.1565: "nunc mitto libellos omnes jam primum absolutos, quos hac aestate de Lapidibus, etc imprimendos curavi, multo labore me : nam et praelo omnia parare, et formam primam quamquam excusam cognoscere me oportuit. Mea nimium festinata sub finem etiam mutilata sunt. Quid facerem ? Typographus ad nundinas festinabat, et ob rei familiaris inopiam differe non poterat." *Ep. Med.*, f. 75r.

concerning Eustathius,⁶⁴ as well as of the *Odyssey*, recalled Hippocratic manuscripts Gessner had on loan, and asked him to pass on messages to Froschauer, while greeting him on behalf of Froben.⁶⁵ With Henri Estienne, he exchanged Greek letters,⁶⁶ and with Oporinus books and manuscripts.⁶⁷ These business letters kept him up to date with publications, brought books and rare manuscripts, and later enlarged his outreach among young scholars, who approached him to facilitate the publication of their works.⁶⁸ But in the 1540's and early 1550's, Gessner, in spite of the success of his first publications, was too much of a novice in the Republic of Letters to be called on to help younger scholars.

It seems, however, that his publications did more to promote him to his first important institutional position than his medical accomplishments. In 1554,⁶⁹ the Town Council of Zurich appointed him to the position of first town physician of Zurich, as a successor to Christoph Clauser.

⁶⁴ Eustathius of Thessalonica was a commentator on Homer and had just been published in a Greek edition, *Εὐστάθιου Ἀρχιεπίσκοπου Θεσσαλονίκης Παρέκβολαι εἰς τὸ Ὅμηρου Ἰλιάδα καὶ Ὀδυσσεΐαν*, Antonio Blado, Rome, 1550, 4 vols.

⁶⁵ ZBZMsC50a 59.

⁶⁶ ZBZMsC50a 54; 57-58. These letters have been studied by Johann Caspar v. Orelli, "Der Briefwechsel zwischen Conrad Gessner und Henricus Stephanus", *Neujahrsblätter der Stadtbibliothek in Zürich*. (1837).

⁶⁷ ZBZMsC50a 29.

⁶⁸ See Chapter 3.

⁶⁹ The date is unclear: some say 1544, other 1554. The official *Ordnung* was delivered by the Council of Zurich in 1554, but it could be a new one. Gessner and Clauser were working closely together before 1554, and the letter from Bullinger, praising the position, while Clauser was getting older and Gessner busier, suggests that perhaps, there were two *Stadtärzte* in Zurich at the time. As far as I know, dates are very blurred on these questions, and most of them rely on the excellent synthesis of Gustav A. Wehrli. The facts are: Clauser died in 1552. We have letters between Gessner and Clauser dated 1547, on various remedies given by one of them. So either Gessner had first been appointed as a *Poliater*, i.e. as a deputy town physician, (and why not in 1544 ?) or he was appointed as a supplementary town physician. Gessner's letter to the Council about his pay rise seems to hint at a long engagement between himself and the Council. (twenty years, i.e. around 1538). Donatella Bartolini, in *Medici e comunità: esempi dalla terraferma veneta dei secoli XVI e XVII*, Venice, Deputazione di Storia Patria per le Venezie, 2006, presented the range of activities possible for town physicians.

1554-65: Letters: the bread and butter of scholarship

This appointment reveals, first of all, that the studentship granted to Gessner for his medical degree might well have had further purposes, e.g. ensuring the city would get a qualified town physician.⁷⁰ Moreover, personal contacts played an important role in securing a good institutional position. Gessner had repeated exchanges with Clauser,⁷¹ to whom he dedicated one of his first medical publications in 1542,⁷² even inheriting (at least some of) his case notes. Finally, beyond the boundaries of the city, the job also gave him a specific status in the scholarly world. It was certainly an institutional position, one that would grant him more respect than the plain title of *medicus*. In the fierce race for institutional positions among young students freshly graduated from their various universities, many of his contemporaries went from one position and from one city to another. The recognition derived from his new status is difficult to assess.⁷³ Some

⁷⁰ In the autobiography he sketched in the *Bibliotheca Universalis*, Gessner claimed that medicine and natural history were his first loves, and that his humanist studies had only been propaedeutic to the realisation of these wishes (BU, f. 180v: “Sed cum a puero ingenium meum in medicinae studium proclive ferretur (ab infantia enim educavit me avunculus meus magnus, sacerdos olim Tiguri, ac in re medica praesertim herbaria non imperitus) et semper succisivis horis libenter in medicorum libros divertissem, et patroni studiorum qui stipendiis Tiguri praesunt me ultro currentem instigassent, visum est Montempessulanum medicinae nomine celeberrimum adire.”) Later indeed, in the 1550’s, students from Zurich benefiting from the same kind of studentship left for France or other universities with a clear mandate of study. Caspar Wolf, Georg Keller studied medicine and succeeded to Gessner, Hans Wilhelm Stucki was intended for theology. In this world of self-proclaimed self-made men, it is interesting to see the extent to which Gessner was a product of the studentship system in Zurich and how the Council selected the men they would then employ in their institutions and to compare this early formation with Gessner’s repeated and militant claims that he had no patrons (despite evidence to the contrary) and that he was the product of political and religious institutions. Little is known about this system, which most probably changed a lot over time.

⁷¹ These contacts were the result of living in the same town; but they also took the form of letters. See Werhli, 1924, 107-113.

⁷² *Apparatus et delectus simplicium medicamentorum*, Lyons, Johannes and Franciscus Frellonius, 1542.

⁷³ Just as it is difficult to assess how important the role of the court physician was, or how well recognised his status was. See Vivian Nutton, “Introduction”, in Vivian Nutton (ed), *Medicine at the courts of Europe, 1500-*

positions, however, were strategic, and Zurich's, with its metropolitan aura, was one of them.⁷⁴ Thanks to it, Gessner exchanged letters with patients from various social backgrounds, as well as with fellow-physicians who referred patients to him or discussed with him remedies, plants and case stories. His consultations by letter were sometimes intended for important members of the clergy or local humanists and their households, who represented his private clientele, sometimes for patients from outside the Canton, sometimes, finally, for the poor.⁷⁵

The town physician position thus ensured to its holder a large pool of potential patients, but also contacts throughout the neighbourhood. It also marked him with the seal of fame, and his correspondents from then on addressed him by his brand new title: Conrad Gessner, *Stadtarzt* of Zurich. However, it was not a position at court, nor was it enough for many of his contemporaries,⁷⁶ to be the town physician of a city without a

1837, London and New York, Routledge, 1989 and "Introduction", in *Medicine in the Renaissance city, Renaissance Studies*, 15 (2001).

⁷⁴ A letter from Heinrich Bullinger to Janus Cornarius stressed his efforts to recruit someone well known while Clauser was getting older and Gessner busier with his publications: "I have no doubts that whoever will take this service will be granted a rich reward; not to think of the fact that he will have within his reach a good part of Switzerland, if only he is lucky with his *Praxis*. There is no eminent physician in Lucerne nor in Zug, even less in the neighbouring Cantons of Schwiss, Uri and Glaris; one cannot find a famous physician in the whole of Thurgau, nor in the whole of Aargau. But every time an illustrious physician has practised in Zurich, he has drawn everyone to Zurich" Bullinger to Cornarius; Staatsarchiv EII335, 2120; EII 336, 89, quoted in Wehrli, 1924, p. 18. Gessner did not really share the enthusiasm of Bullinger for the position, and especially considered it low-paid. The main inducement for potential candidates was thus the wide possible clientele.

⁷⁵ In this last instance, it may be supposed that Gessner kept a copy of his letter in order to remember the treatment he had prescribed, with a significantly different view, then, from copies of letters to important families, which also added to Gessner's status as a physician. For more details on Gessner's patients and Gessner's medical correspondence, see Chapter 4.

⁷⁶ Gessner's only promotion was a Canonry at the *Grossmünster*... a considerable increase in his income, but certainly not one in status or scholarly fame. Others, by comparison, moved up and down the ladder of scholarly honours. While Felix Platter did not leave Basle once he had obtained his medical doctorate, he nonetheless went up the honours ladder by being appointed Rector at the University, for instance. Janus Cornarius moved incessantly from a professorship of Poetics in Basle to a position of *Stadtarzt* in Zwickau,

university or a big patronage institution. However, besides a modicum of scholarly acknowledgment, this ensured him a constant salary of 80 florins,⁷⁷ a supplement in kind including beer and wood, in addition to the revenue procured by his private clientele. In exchange, he had to attend to poor patients, to survey and visit the hospitals, to preside over the *Wundgschau* and the diagnoses of leprosy for the whole Canton, to assess and provide help to other medical practitioners and to lecture every day on physics at the *Grossmünster*.⁷⁸ Teaching, healing, and publishing books did not prevent him from spending a lot of time on another large-scale project: the four volumes of his *Historia Animalium* were published between 1551 and 1558, accompanied by volumes of pictures. This project involved not only wide reading, but also a social network of devoted correspondents, keen on reporting new findings of animals and on sending material and pictures, one Gessner, by that time, had effectively created. Indeed, throughout the 1540's and 1550's, his correspondence network grew exponentially, from 6 correspondents for the period 1541-1545 to 39 for the period 1556-1560.⁷⁹

then in Nordhausen, in Frankfurt am Main. He then taught briefly at Marburg University, went back to Zwickau and died a Professor at Jena University. Girolamo Cardano went from Saccolongo to Milan, Pavia, Scotland, London, Bologna and Rome, from a life as a physician to a position at court or a university job.

⁷⁷ For a comparison, Janus Cornarius was offered 100 florins a year as a *Stadtarzt* in Zwickau in 1546 (see Otto Clemens, *Kleine Schriften zur Reformationsgeschichte (1897-1944)*, E. Koch (ed), 1984, Bd 4, 36-76.

⁷⁸ On the duties of a town physician, see Chapter 4.

⁷⁹ The data are here very sketchy, as I do not have an exact date for a third of the letters, and as, for all correspondents except Sylvius Caesar Scaliger and Théodore de Bèze, whose letters were obviously the first they sent to Gessner, I do not exactly know when they entered the correspondence network. The numbers here presented in the figure represent only 101 correspondents, out of the 250 identified.

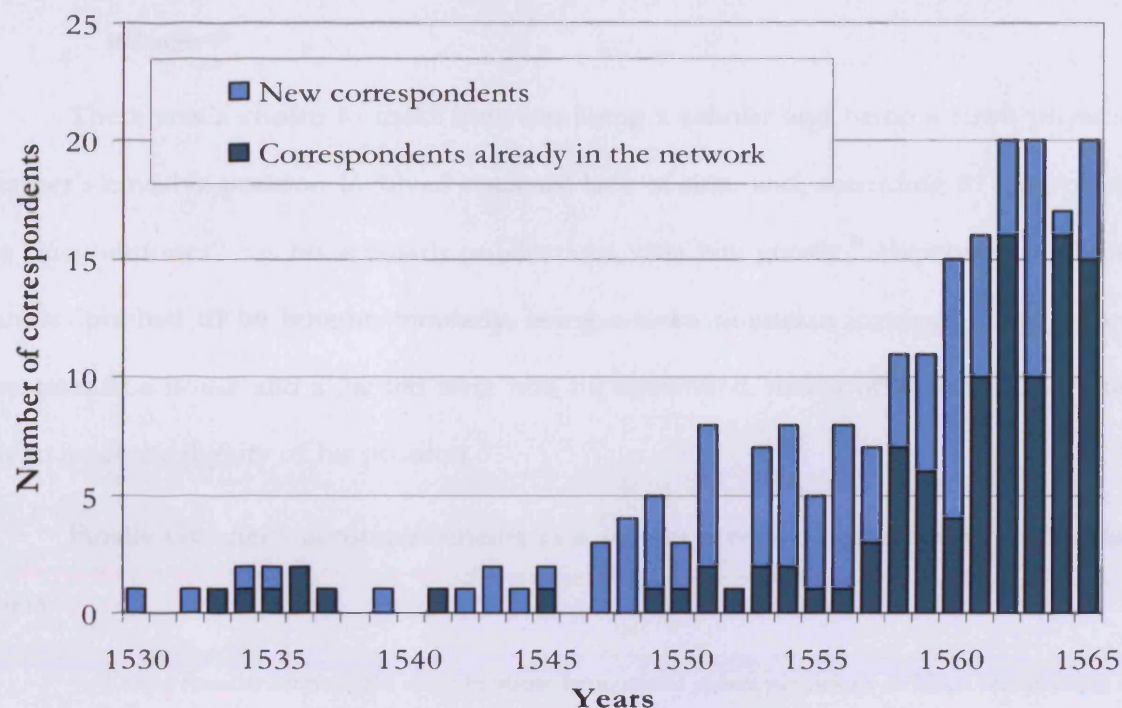


Figure 1: Gessner's correspondents and their entrance in the correspondence network.

However, it was not always easy to be a learned physician. In 1558, Gessner wrote to Heinrich Bullinger and to the Council of Zurich, to ask for a pay rise. The main argument in the letter to Bullinger was two-fold. Being busy had been harmful to his health and the lack of time had prevented him from exercising his medical profession properly. However, he said, he could not stop working on his publications, because his pay was too low and he needed the money he could earn from his work with printers in order to meet the needs of numerous relatives and of the dignity of his position. At the moment when he had just published the *Historia Animalium*, Gessner seemed to have felt a need for rest:

Already exhausted by my labours, finished, made thinner, almost made blind, not to say sometimes hardly keeping my wits about me, (and that is no wonder with the pressure of such long-winded writings) shall I again return to my old past? Shall I go back and submit to labours,

which, for two or three full years, will not give me time to breathe again? Is that your advice, my Bullinger?⁸⁰

There was a choice to make between being a scholar and being a town physician. Gessner's enviable position involved constant lack of time and, according to him, money. His "lucubrationes", i.e. his scholarly publications, cost him greatly.⁸¹ Expensive books and manuscripts had to be bought. Similarly, being a town physician involved some material investments: a house and a garden were not, he contended, marks of wealth, but the only way to meet the dignity of his position.

Finally Gessner's accomplishments as a scholar involved corresponding with many others:

I have familiar intercourse with the most famous and oldest physicians of kings and princes, and not only do they often teach me a lot in their letters and send me exquisite remedies, but also they learn from me, and some of them do not hesitate to call me their Preceptor.⁸²

Gessner seems to have taken this mark of esteem and the obligation of correspondence very seriously. His correspondence kept increasing; as indicated by the growing numbers of letters he sent and received.

⁸⁰ "Egone, jam exhaustus laboribus, confectus, emaciatus, excoecatus fere, ne dicam aliquando vix apud me; (neque mirum in coactis istis scriptionibus tam prolixis) iterum in vetus pristinum redibo? Rursus ne subibo laborem, a quo duobus aut tribus annis integris non respirem? Haec suades mihi D. Bullingere?" ZBZ MsV320.3, VIII.

⁸¹ Among the seventy books he published during his life, only the *Bibliotheca universalis* and the *Pandectae*, as well as the *Historia Animalium*, did not obviously produce any substantial earnings for Gessner, directly at least. It appears that, however, translations and editions from the Greek and the Latin, as well as books like the *Thesaurus Evonymi Philatri*, a book of medical secrets, or the various editions of *Icones Animalium*, or vernacular shorter versions of the *Historia Animalium*, were promised a wider diffusion, and were financially rewarding for their author. I am grateful to Laurent Pinon on this point.

⁸² « Praestantissimos auosque et Principum et Regum medicos familiares habeo, qui ut non raro suis literis non nihil me docent, et exquisita quaedam remedia mittunt. Ita a me quoque docentur, nec adspernantur eorum quidam Praeceptorem me vocare ». ZBZ Ms V320.3, VIII.

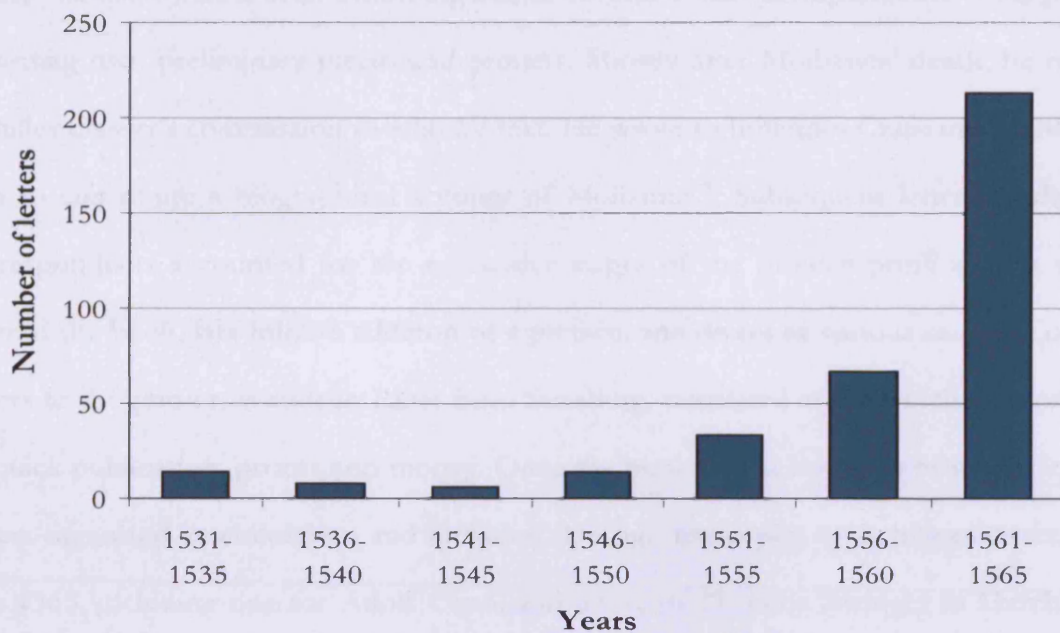


Figure 2: Letters exchanged by Gessner (1531-1565)

But letter writing was a costly practice. Adding to the cost of paper was the payment of the couriers and messengers, which weighed mostly on the addressee, who used to pay the messenger at reception. Entering into a correspondence was thus no anodyne decision, and maintaining it necessitated either important financial means, or a network of willing friends who could act as messengers.

Apparently, Zurich Council agreed with him and granted him a Canonry, thus ensuring the material well-being of its town physician. Whether they had opted for a resident scholar or for an efficient town physician is however doubtful: Gessner published, during the last eight years of his life, seventeen books on various medical and naturalistic subjects, which cost him a great many hours of work. His letters gave his correspondents accurate reports on the various stages of his publications, making each book, however short, a long-term project. In 1565, the year of his death, two books were published under his name: a posthumous edition of Johannes Baptista Moibanus' translation of Dioscorides' *Euporista*, and a short treatise on stones, metals and fossils. For one to four

years,⁸³ he had by then been informing one or several of his correspondents of his progress regarding text, preliminary pieces and printers. Shortly after Moibanus' death, he received Achilles Gasser's commission to edit the text. He wrote to Johannes Crato in Vienna to ask him to contribute a biographical account of Moibanus.⁸⁴ Subsequent letters to the same correspondents accounted for the successive stages of the project: printing of a sample, then of the book, late-minute addition of a preface, and delays of various causes. Countless letters to the printer, Wendelin Rihel from Strasburg, circulated as well, including promises of quick publication, proofs and money. Once the book had at last been printed, Gessner's letters organised its circulation and diffusion. He sent ten copies to Achilles Gasser, on 19 July 1565, including one for Adolf Occo, and wrote to Theodor Zwinger in March of the same year, in Basle:

I will arrange for four copies of four copies of the *Euporista* of Dioscorides to be sent to you from Strasburg to Mechlinensis,⁸⁵ one of which I will give you, another to M. Houberus, the third to M. Platter and the fourth to M. Gratarolo.⁸⁶

A collective project from the beginning, as Gasser had offered Gessner the publication and apparently closely followed its progress, the edition of Moibanus' book remained all along closely and very practically embedded in his letter exchanges. As much as frantic activity and organisation, periods of silence in the correspondence were also linked to the project:

I have not received, my very dear Gasser, a letter from you in a long time, nor written myself, as I had nothing worthwhile, and I had decided I would not write more without sending also the finished Preface to our Dioscorides. But I don't know why and how I was not able to give sufficient attention to my design up to now; indeed, I am so disposed, call it a defect or

⁸³ The editors of the *Ep. Med.* volume have apparently altered the dates of the letters so as to make a reconstitution of events difficult.

⁸⁴ *Ep. Med.*, ff. 9v-10r.

⁸⁵ Petrus Mechlinensis was a printer in Basle.

⁸⁶ Gessner to Zwinger, 22.03.1565, *Ep. Med.*, f. 111r.

sometimes also a virtue, that I will always finish first what is an emergency. But whatever can be postponed, I will postpone it as long as possible. And there are many things down here that are an emergency, new and true...⁸⁷

Correspondence thus functioned as a progress report while constructing scholarly work as a work in progress. Gessner's approach to his work was closely related to the rhythm and obligations of his correspondence: writing letters or composing prefaces, he found himself compelled to produce by emergencies or by news he needed to share immediately.

Other causes sometimes made correspondence a matter of urgency. Publishing his *magnum opus* on plants counted as one. Since the end of his *Historia Animalium* project, Gessner had been preparing engravings and drawings,⁸⁸ writing demands to remote correspondents for the living plants or at least for information and observations, in order to prepare a *Historia Stirpium* that would compete with Leonhardt Fuchs' and Pietrandrea Mattioli's botanical works. Just as correspondence, during the writing of the *Historia Animalium*, served both as a projection of his *persona* and as the channel through which he could access remote living beings, the main contents of his letters then consisted of an exchange of botanical ideas and material. Some were mere lists of purchases Gessner sent to close friends or ex-pupils; others were more elaborate discussions or depictions of the virtues of a plant. Most mentioned his investment of time and a growing sense of the emergency and overwhelming weight of such a project. This feeling also emerged from the correspondence itself: writing to colleagues and friends kept him busy, something many other reasons contributed to reinforce. Perhaps the main one was, for the last three years of his life, the spreading of an epidemic of pleurisy or plague, throughout Switzerland and Southern Germany. Besides the increased number of patients and the responsibilities it

⁸⁷ Gessner to Gasser, 26.6.1563, *Ep. Med.*, f. 27r.

⁸⁸ Around 1500 paintings have been found in Erlangen, and published in facsimile by Heinrich Zoller (ed), *Conradi Gesneri Historia Plantarum*, Dietikon-Zurich, Urs Graf-Verlag, 1972-1980.

involved for the town physician of Zurich, this epidemic also caused an increase in the time-consuming practice of corresponding. Letters maintained with Gessner's correspondents a corridor for information on the spread of the disease, the experiments attempted, the cases he had met with. But they also functioned as a proof of life, a touchstone, the only one scholars and friends, living apart, had.

As it was, all attempts to elaborate a cure were pointless: Gessner himself was struck by the disease, and died a few days later on 16 December 1565. He left all his papers to Caspar Wolf and charged him with preparing and publishing his *Historia Stirpium*. Among these papers, a number of letters, cut and pasted in his books or in his manuscripts, remained.

Section 2: Letters and Self-presentation

At every turning point, every moment of Gessner's life, the crux was letters. To get a scholarship or a rare specimen, to announce his wedding or to promote his books, and even to practise his profession and widen his clientele, he resorted to the epistolary form, and wrote scholarly epistles or consultations by letter. If mastering the art of epistolary writing was capital, it was not only because letters were the main means of communication between individuals and between individuals and institutions, but also because in letters, during the Renaissance, several features coexisted that made them a token of their author's worthiness: a man who could write letters was a man one could invest in – both money and time. They helped him to define his professional identity, as well as a more intimate self.

Letters were, in the sixteenth century, a traditional means of self-fashioning because they were a space for autobiographical, or at least ego-centred expression.⁸⁹ In fact, a

⁸⁹ On this basis, many historians and biographers have constructed a reading of scholars' and especially of Gessner's feelings. That letters belong to the category of *ego-documents* is so obvious it is very rarely questioned

tradition going back to Cicero and relayed by sixteenth-century humanists such as Erasmus had assimilated them to a face-to-face conversation with an absent friend, where the letter, so to speak, was impersonating its author for the addressee.⁹⁰

Gessner, like most of his contemporaries, agreed with this comparison. He thus wrote to Johannes Hospinianus, a professor of theology at Basle University:

For me, I love you as much, and keep you under the eyes of my mind, as if I could really see you present, and enter into conversation with you every day: and I would thus like to discuss various subjects with you in letters, both out of duty and to learn something from your excellent learning.⁹¹

Based on a relationship at a distance between two individuals, letters recreated an image of the distant author for the addressee. They acted as a substitute for face-to-face conversation, conveyed, and almost impersonated the self of their author. The success of autobiographical genres, the importance of letter writing in the training of young humanists as an exercise helping to form one's own style, the inheritance of ancient rhetoric that assimilated letter writing to discourse and favoured a structure based on the construction of an authorial ethos, in the tradition of judiciary eloquence, all this helped to create a genre revealing the 'true self' of their author.

and discussed in historical writings, especially when the historian deals with archival products, and not with what are called "literary letters", or letters published after many modifications. The studies of Rudolf Drecker on ego-documents, as well as those on self-presentation, for instance the excellent collection by Toon Van Houdt, Jan Papy, Gilbert Tournoy and Constant Matheussen (eds), *Self Presentation and Social Identification. The Rhetoric and Pragmatics of Letter Writing in Early Modern Time*, (Supplementa Humanistica Lovaniensia 18), Leuven, Leuven University Press, 2002 have insisted on the way such texts were constructed by a larger culture, as much as they revealed something of the self of their author and highlighted the intents hidden behind texts, often discerning strategic moves in the ways early modern scholars who were very familiar with the rules of ancient rhetoric built their own ethos or persona. It would be, however, excessive to consider that a strategic intent was hiding behind every word of Gessner's letters.

⁹⁰ See on this point Judith Rice Henderson, "Humanist Letter Writing : Private Conversation or Public Forum", in Van Houdt and al., 2002, 17-38

⁹¹ Gessner to Hospinianus, 13.10.1562, *Ep. Med.*, f. 103r.

Self-presentation, rhetoric and the addressee

Letters were, however, creations, and not trustworthy mirrors of life, and humanists knew it. What letters carried to their correspondents was a carefully carved *persona*.⁹² Admittedly, some of Gessner's manuscript letters bore witness to the relative spontaneity of their creation.⁹³ Often, like those to Johannes Fabricius Montanus, a young pastor in Chur and a former student of his, they were lists. Numbers highlighted their structure and facilitated answers. Sometimes, Gessner did not even bother to make a complete sentence. Strikethroughs and second thoughts written in the interspaces probably indicate the absence of earlier drafting. In contrast with this 'spontaneous' presentation, some letters only subsisted in their drafted form, most certainly because their author had them afterwards copied by an amanuensis or copied them himself. There, each word was weighed in order not only to convey their message, but also to preserve the character of its author. A draft of Gessner's answer to Thomas Erastus's letter on plague, for instance, was afterwards sent to several correspondents, properly copied and reproduced.⁹⁴ At both ends of the epistolary communication, thus, letters might be shared, opened and thought about. Indeed, their status regarding privacy and publicity was extremely ambiguous in the early modern period.⁹⁵ As a reflection of the self, they were regarded as an emanation of the

⁹² Lisa Jardine's work on Erasmus is very clear on this point Lisa Jardine, *Erasmus, Man of Letters*, 1993.

⁹³ The question of how drafts were used, and when, and why, and of the way in which it structured the hierarchical relationship in the correspondence, would be worth more inquiry.

⁹⁴ Erastus' letter and Gessner's draft can be found in ZBZ MsZVII119 (unbound). It was later published in the former's *Disputationum et epistolarum medicinalium volumen*, Zurich, 1595, letter XXV, ff. 90r-105v.

⁹⁵ The notion of what was private and what was public was at any rate blurred in the Renaissance. See for instance Philippe Aries et Georges Duby, *Histoire de la vie privée*. Paris, Seuil, 1985. See also, on the status of letters between private and public, Judith Rice Henderson, "Humanist Letter writing: private conversation or public forum" 2002, and H.J.M. Nellen, «In Strict Confidence: Grotius' correspondence with his socinian friends», in Van Houdt et alii, *Self Presentation and Social Identification. The Rhetoric and Pragmatics of Letter Writing in Early Modern Time*, (Supplementa Humanistica Lovaniensia 18), Leuven, Leuven University Press, 2002, 227-245. Adam W. Mosley, N. Jardine & K. Tyjberg, proposed an interesting study of the epistolary space as a

private person. They were also sealed, and contained, at least in Gessner's case, personal elements, on his wife, his dejection at being childless, and his illnesses. However, the huge number of epistolary publications in the Renaissance,⁹⁶ and the constant use of the epistolary form in controversial contexts⁹⁷ contributed to reinforce, in the minds of sixteenth-century correspondents, the notion that whatever they were writing could and might well be either made public and circulated in the Republic of Letters or published in a book.

Gessner was well aware of this eventuality. Actually, he had himself resorted to the publication of letters in the course of a controversy that opposed him to Pietrandrea Mattioli, the famous author of a Commentary on Dioscorides' *Materia Medica*, over the identification of several plants, and particularly of the *aconitum primum*.⁹⁸ In 1554, in his *De raris et admirandis herbis* Gessner had attacked Mattioli's picture of the *aconitum primum* as untrue, and proposed another identification. His interpretation was reinforced by two epistolary testimonies, i.e. by the transcription of two letters describing the *tora venenata* he

blurred space between private and public in 'Epistolary culture, editorial practices, and the propriety of Tycho's *Astronomical Letters*', 2003.

⁹⁶ See Cecil H. Clough, *Cultural Aspects of the Italian Renaissance, essays in honour of Paul Oskar Kristeller*, New York, Manchester University Press, 1976.

⁹⁷ Several of Gessner's correspondents published collections of controversial letters. Taddeo Duno for instance, had the result of a letter exchange on pleurisy published in 1555, leading the reader through the different stages of a controversy he had with an empiricist named Zoius (*T. Duni et F. Cigalini J.P. Turriani medicorum ... item H. Cardani ... disputationum per epistolas liber unus*, Tiguri, 1555). Even more interesting, Pietrandrea Mattioli published twice the letters through which he had entered in controversy with all the great names of sixteenth-century botany, as well as the letters of support he received from friends at these occasions (*Epistolarum medicinalium libri quinque*, Prague, 1561). Such publications were thus used in the Republic of Letters, as self-advertisement but also as a space for learned discussion between *studentes naturae*. Why were letters an ideal space for controversy? Most probably because they inhabited this blurred space between private and public, thus making the negotiations any controversy involved – whether hidden or on the open – more supple.

⁹⁸ Pierandrea Mattioli, *Commentarii in libros sex Pedacii Dioscoridis... de materia medica*, Venice, Valgrisius, 1544.

was proposing as the real *aconitum primum*.⁹⁹ Letters, however, were not merely testimonies. In controversial contexts, they played the role of manifestos as effectively as longer pamphlets. Three years later, in 1557, Gessner and Melchior Guilandinus¹⁰⁰ put together and published an exchange of letters on several false identifications made by Mattioli. Although it was claimed, in the Preface, that the natural historian of Zurich had written the letter without intending it to be published, it is difficult to say whether he was telling the truth or not.¹⁰¹ The whole controversy clearly involved careful drafting of letters bound to a wider circulation than the official one-to-one conversation. In 1558, Gessner received a letter from Mattioli.¹⁰² When he drafted his answer, he knew his words would become public – at least, he prepared them for copying, and not for the use of Mattioli only. He knew also they might be published.¹⁰³ His letter was then inserted in a sealed letter to Girolamo Donzellini and Johannes Hess, two imperial physicians he had himself appointed to act as referees in the dispute.¹⁰⁴ When he drafted his answer, the controversy had reached a point where himself was in a difficult position: the ‘referees’ had chosen Mattioli’s opinion. Worse, they had also condemned Gessner’s way of dealing with the dispute. Therefore, he carefully weighed his words, annotating abundantly the letters both of the referees and of his adversary, and drafting his answer, striking through the sentences

⁹⁹ On the controversy, see Candice Delisle, “The letter: private text or public place? The Mattioli-Gessner Controversy about the *aconitum primum*”, *Gesnerus*, 61 (2004), 161-176. This publication was partly based on a DEA dissertation completed under the supervision of Laurent Pinon and Dominique Pestre in 2002, in the EHESS, Paris.

¹⁰⁰ Melchior Guilandinus opposed Mattioli very violently, Gessner was apparently more moderate.

¹⁰¹ *De stirpium aliquot nominibus epistolae II*, Basle, Episcopus, 1557, p. 3.

¹⁰² ZBZ MsC50a36.

¹⁰³ When he wrote on the same subject to Crato von Krafftheim, who acted as a go-between between the two men, Gessner insisted on the private character of what he was saying, and on the fact that he expected some part of his letter to be deleted (in Greek). Thus, at the very same time, he played on the notion of secrecy, on the silence he expected from his correspondent to keep on the contents of his letters, and especially on his unhappiness regarding Mattioli’s attitude.

¹⁰⁴ ZBZMsC50a35.

and the words in order to find the exact formulation to convey his sense of dignity and his own indignation.¹⁰⁵ He thus insisted on his mastery of ancient languages and authors, an essential point in the case as most of the problem rested on the identification of Dioscorides' plant as a modern, existing one, i.e. on the finding of a plant which fitted Dioscorides' discussion. Moreover, Mattioli's Greek was notoriously inferior to Gessner's.

¹⁰⁵ As we shall see, the presentation of the letter, the care Gessner took, or not, over the outlook of his missive, was part of his strategies of self-presentation.

The latter thus insisted, on purpose, on Greek quotes and on philological discussions in his answer, and underlined his mastery of Galenic texts. He also contested the logic of his correspondent's arguments:

Again, you persist in making (pardon me), the *aconitum* a cold plant, against the opinion of Galen and ancient physicians, who attributed to all *aconita* one single virtue, and we have, to our detriment†, shown that all the other *aconita* we know are too hot. It should be enough, you say, to make you believe that the *aconitum* is a cold plant that Dioscorides mentioned it only among plants that are very cold. What a solid argument! Therefore, the *sardonius*, this summer ranunculus, will be cold, because Dioscorides discussed it in the sixth book with the coldest poisons¹⁰⁶

In an afterthought, Gessner stressed his 'hands-on' approach to nature by adding in the margin:

† My tongue, and I think my throat, burned and scarred, by tasting not only *tora*, but also the many *aconita* I knew.¹⁰⁷

Insisting on his empirical experience, he thus demonstrated his own readiness to put his own body, if not his own life, at risk in order to achieve knowledge.

Advertising the self: Gessner as a learned physician

Such controversial letters functioned in two ways: on the one hand, they adopted the aggressive approach to discussion early modern scholars had made their own; on the other hand, they defended their author's scholarly values and persona. Indeed, letters

¹⁰⁶ "Rursus ~~creavi~~ solidissime (ignosce) *aconitum* jam frigidum facis, contra Galeni et veterum medicorum sententiam qui aconitis omnibus vim unam eandemque tribuunt : caetera autem *aconita* quaecumque nos novimus, malo etiam nostro† nimis calida esse experti sumus. Satis, inquis, ut *aconitum* jam frigidum crederes, esse debebat, quod Dioscorides plantarum tantum quae frigidissimae sunt, censum illic facit. O solidum argumentum. Ergo et Sardonis ille [aestuusus] ranunculus, frigidus erit: quoniam Dioscorides in sexto inter frigidissima venena de eo prae[tene]bat." ZBZMsC50a37.

¹⁰⁷ : "† (lingua, putavi faucibus, ustis atque erosio, non Tora tantum, sed et reliquis aconitis quae multa novi gustatis)" MsC50a37.

functioned, in the early modern period, as visiting cards.¹⁰⁸ They charmed their readers by their virtuosity and erudition, but also bore the style of their author in their handwriting and style. Throughout his letters, Gessner highlighted the same qualities and tensions in his self-presentation. On the one hand, he described himself as a learned scholar, one with a strong grip on ancient texts, one who could write and read Latin and Greek, one who could bring to his study of nature and of the human body the literary knowledge of the humanist; on the other hand, he stressed his ‘hands-on’ practical approach to knowledge, whether through self-experimentation or through the mastery of various medical techniques.

This, however, did not prevent the letter from being adapted to its addressee and specific aim, a golden rule of letter writing.¹⁰⁹ Gessner’s patients and those who facilitated his career as a town physician’s were not necessarily expecting huge scholarly achievements from their physician – although they might have expected that as well.¹¹⁰ What they wanted was to be cured. Thus when he wrote to Bullinger about his pay rise, he cleverly chose to remind him of his medical accomplishments, and especially of his help concerning his son Rudolf, whom he had treated for dropsy:

None of the physicians of our century knew how to bleed arteries in good time; almost none knew how to use in the most serious diseases of women uterine clysters, and other remedies, which I have retrieved from the time of Hippocrates and used several times successfully. I have, thanks be to God, cured some serious cases of dropsy, numerous apoplexies, several epilepsies

¹⁰⁸ Or so Henk Nellen called them. H.J.M Nellen, “La correspondance savante au dix-septième siècle”, *Revue XVIIe siècle*, 178 (1993), p. 87-98.

¹⁰⁹ On the importance of adapting the letter to the addressee, see Erasmus, *De conscribendis epistulis*, 1-2, and the way in which he contested the use of manuals solely for copying models, or reproducing them.

¹¹⁰ The problem of learned physicians was particularly important during the Renaissance, as it entered into matters of professionalisation of medical bodies. See for instance, Ian Maclean, *Logic, Signs and Nature in the Renaissance: The Case of Learned Medicine*, New York, New York, Cambridge University Press, 2002.

and other terrible diseases in those who came to me on time and consented to obey me. I have called back to life several asthmatics already almost expiring. [...]¹¹¹

But he also insisted that his abilities went beyond the efficacy of his cures. It also consisted in mastering techniques typical of other healers – gynaecology, arteriotomy, knowledge of plants and animals to prepare remedies – and in being an accomplished scholar. His knowledge of plants and animals, for instance, was proved by his publications; his proficiency in Greek manifested itself in reading medical and other ancient texts, but also in speaking and writing it. This same ability was the one that caused Gessner's busyness, because it called for the buying of books and manuscripts, and because it was part of the qualification of being a learned physician.¹¹² His attempt at advertising himself was thus framed in the process of professionalisation of medicine and contributed to the emergence of the persona of the learned physician. Cunningly, he summarised the situation by saying:

It is fair that I account for my exercise of medicine to them [i.e. the Town Council], especially now that I have finished a very big book, and am about to begin another, so that, if they want me to continue publishing, I shall continue. If not, and if they would rather have me more devoted to medicine than their generosity warrants, so be it. [...] And if the council wants me to be a good and active physician, let them show themselves kind and generous masters.¹¹³

¹¹¹ "Nemo medicorum nostro saeculo arteriarum in temporibus sectionem novit : Nemo fere in gravissimis mulierum morbis uteri clysteres, et alia quaedam, quibus ego ab Hippocratis usque seculo repetitis non semel feliciter usus sum. Hydropes aliquot graves, apoplexias non paucas, epilepsias plurimas, et alias ingentes morbos / : Dei gratia:/ curavi in iis, qui et mature accersere et obtemperare voluerunt. Series asthmaticos quosdam jam fere animam exhalantes, revocavi" Gessner to Bullinger, ZBZ MsV320.3.VIII.

¹¹² When he stated his dilemma, Gessner explained that the Basle printer Froben wanted him for an edition of the complete works of Galen, and Froschauer, printer in Zurich, expected him to prepare an edition of the third book of *Icones Animalium*. Actually, he did both.

¹¹³ "Aequum est autem, ut illis rationem professionis meae reddam, praecipue hoc tempore, quo maximum opus finivi, et inchoandum erat novum ut, si velint me ita pergere, pergam. Si minus, et in medicina diligentiorum esse liberalitate sua, id quoque fiat. [...] Quod si me bonum et alacrem medicum senatus habere velit, ipsi quoque beneficos et liberales dominos se praebeant", Gessner to Bullinger, ZBZ MsV320.3.VIII

Here, scholarly achievements were mostly presented as bread-and-butter activities, or necessary complements to the learned physician's excellence. What the patient expected when he consulted a physician was the production of a certain kind of text: a consultation by letter listing the various treatments and sometimes explaining the causes of the disease.¹¹⁴ What Gessner gave his Zurich masters was exactly that: a consultation by letter written to Bullinger, explaining the origins of his discomfort and overturning both the *consilium* model and that of the petition letter.

Self-presentation and epistolary models

Adapting a letter to the expectations of the addressee involved the existence of models. These expectations did not come out of nowhere: they were dictated by the broader "epistolary culture" and by a certain infiltration of Gessner's audience by models provided by letter books and medieval tradition in church, law and business.

Gessner himself was not immune to their importance. Side by side with other, less crafted letters, many were close to the humanist norms of letter writing. Like his colleagues, he composed letters of congratulations and of condolence,¹¹⁵ asked for *consilia* on matters of law and money,¹¹⁶ conformed to the rules of *artes dictaminis*. His own *Pandectae* suggested models of letters, based on Marsilio Ficino, Ovid and Pliny, for specific circumstances. He

¹¹⁴ From a consultation by letter, they expected solutions to their health problems, and tried to create trust, necessary to their survival, out of the written word. I will not deal here with the question of trust. For a first approach, see Steven Shapin, "Trusting George Cheyne: Scientific Expertise, Common Sense, and Moral Authority in Early Eighteenth-Century Dietetic Medicine", *Bulletin of the History of Medicine*, 77, (2003) 263-297. However, the fact Gessner was conforming to the model of the *consilium* contributed to creating a trustworthy aura around him. On the same questions of trust, Gessner also insisted on his ability to experiment on himself.

¹¹⁵ For instance, a letter to Georg Keller after the death of his father, 06.03.1554, in *Ep. Med.*, f. 123.

¹¹⁶ See for instance a consultation by letter asking the jurist Muraltus how Gessner could recover a debt, and a copy of this consultation to Heinrich Bullinger, so that he can have an idea of the problem. ZBZMsC50a50.

had, himself, in his library, several collections of letters, which served as models for letter writing, as Cecil Clough demonstrated.¹¹⁷

It was because Gessner had a mastery of these models that he could play with them.¹¹⁸ His use of formulas of salutation, and especially of epithets like *clarissime*, *amicissime*, demonstrated his own abilities and constructed an ethos and a community of scholars based on friendship. The variations highlighted the author's literary skills and shaped his relationship with his addressee. The classical figure of the *captatio benevolentiae*, for instance, was reduced to nothing when he was writing to young scholars from Zurich, and took on huge proportions for the son of the great Julius Caesar Scaliger. There, Gessner expatiated on his rather amazed happiness at gaining such a friend:

I don't know which letter, excellent Scaliger, was ever expected with more hope, and brought me more pleasure than your recent one, so very sweet and knowledgeable; and while I could not answer it with as much eloquence, I will make every effort in answering you, so that you will find no fault with me and understand that my zeal is equal to yours. Who indeed would not love the son of the incomparable Julius Caesar Scaliger, the first of men for virtue and wisdom, and the prince of every sort of knowledge; who would not suspect that the son is the very heir of the paternal praises, (which is rare in the sons of heroes) and almost another father? That is why I judge I will attain the highest summit of my happiness (which on earth is never higher than in the friendship with good and learned men) when I have acquired you as a friend.¹¹⁹

Despite this self-denial, Gessner met all the requirements of a learned letter: long, complex and tortuous salutations, praise to the father and the son. He also chose to be

¹¹⁷ According to Urs Leu's first inventory: *Delectae quaedam graecae epistolae ceu flosculi .. ab Aldo et aliis...* Tübingen 1540, ZBZ[17.746.2 and Manardi's and Lange's *Epistolae medicinales*. Basle, Isengrin 1540, [Z St 37.2]. and Basle, Nicolaus Brylinger, 1560, [Z 22.897.3]. He also used the exemplar of Cicero's *Epistolae familiares* (Bevilacqua, 1546) possessed by the Stiftbibliothek. See also Cecil H. Clough, "The Cult of Antiquity: letters and letter collection", in Cecil H. Clough, *Cultural aspects of the Italian Renaissance, essays in honour of Paul Oskar Kristeller*, New York, Manchester University Press, 1976.

¹¹⁸ Letters, according to humanistic theories, could not merely copy a text given in an *ars dictaminis* or a handbook. Erasmus, *De conscribendis epistolis*, 1.

¹¹⁹ Gessner to Scaliger, 1561, *Ep. Med.*, ff. 132v-133r.

defective in the only aspect a scholar could take pride in being deprived of: his letter, he said, would lack eloquence. Although it is not very obvious here, brevity characterised Gessner's epistolary style and he was happy whenever he found the same disposition in his correspondent, as he wrote to Adolf Occo:

You may, oh the sweetest of friends, answer my letters sooner or later, according to when your occupations make it easy or hard: and I am sure you will not begrudge me the same privilege in return. One could be *laconic, Asian or something in between*, but I am, by nature, *a man of few words*: and it is even more necessary now, *because of my absence of leisure*.¹²⁰

Because he found in his multiple occupations an excuse for writing short letters, Gessner never ceased to mention them. A *topos* of scholarly discourse up to now, busyness served as an excuse and as a *faire-valoir*: an excuse for late, brief or rough answers, a *faire-valoir* for their author's other priorities: writing books and healing people.

The *topos* of the busy man

Indeed, among the main features he tried to project through his letters, the most important was perhaps his busyness.¹²¹ The image of the busy, overwhelmed man was both a mandatory section of epistolary writing, and one on which his author could play the finest variations in order to shape more attractively his image. Whether in the addresses or in the ends of the letters, traditionally devoted to the '*captatio benevolentiae*', being busy made up for delays and gaps in the correspondence and lubricated the difficult exchange of letters. It substantiated as well the reputation for modesty craved by contemporary

¹²⁰ Gessner to Adolf Occo, 07.01.1565, *Ep. Med.*, f. 59v.

¹²¹ This was, and still is, a very successful *topos*, one that scholars, learned professions and business men used constantly over the centuries. However, the use and the variations greatly differ between individuals.

scholars. For instance, an ending like “I make haste. I have not re-read”¹²² attracted the correspondent’s attention to the natural and spontaneous perfection of the author’s Latin (and sometimes, Greek, a much rarer accomplishment). It protected Gessner from reproof in case of errors, presented him as a modest and therefore decent man, and hinted at his own writing abilities. The last two points also presented the advantage of featuring him as an average member of the Republic of Letters.¹²³

Moreover, the *topos* of the busy man established Gessner’s importance as a scholar. In 1551, he apologised to Benedictus Aretius, a professor of theology in Berne and one of his older friends:

Forgive me for not having answered it [your letter] (to hide nothing from you) for a multitude of reasons. The first is that what you asked for [seeds] doesn’t exist among us, and I have to ask for them in France or in Italy; then, due to the lack of messengers, I could only answer your letter at the time of the Frankfurt fairs, when, due to the books I am editing, I am more exceedingly busy than at any other time of the year, and always have been. Add to that the calamities of war [...]¹²⁴

Squeezed between the difficulties of providing plants from foreign countries and the sorrowful events of the war, being busy with the preparation for the Frankfurt fairs appeared as a rather light excuse, the more so because it was used in a comparatively

¹²² See for example the concluding formula of the letter to Occo, dated 19.06.1564: “Haec subito. Ignosce, et vale cum CL[arissimo] V[iro] domino parente tuo, et amicis. » « These in haste. Excuse me, and farewell to you and your very famous father and our friends », *Ep. Med.*, f. 52r.

¹²³ For an introduction to the questions of *ethos* in the Republic of Letters, see Hans Bots and Françoise Waquet, *La République des Lettres*, Paris, Belin – De Boeck, 1997 and Anne Goldgar, *Impolite Learning: conduct and community in the Republic of Letters, 1680-1750*, New Haven and London, Yale University Press, 1995.

¹²⁴ Gessner to Aretius, 01.07.1551, *Ep. Med.*, f. 115v.

discreet way.¹²⁵ However, it also tactfully highlighted Gessner's role in one of the biggest scholarly events of the time and his high status as an author.

The *topos* also contributed to the shaping of a scholarly ethos: the three-fold rhythm uniting busyness, forgetfulness¹²⁶ and friendship¹²⁷ was always reiterated in his letters: "You should forgive the busiest and therefore the most forgetful of men, but always the most loving towards you"¹²⁸ he wrote to Johannes Cosmas Holtzach.

While busyness was in the background of every one of Gessner's letters, it took very different shapes according to the addressee. In the 1558 letter to Bullinger, being compelled to prepare books in order to compensate for his low pay had been represented as the principal hindrance to a proper exercise of the medical profession. Other letters told quite a different story. The naturalist Melchior Guilandinus, at that time in charge of the botanical garden of Padua, was told that:

The office of public physician, by which my work is devoted to everyone, and often even free of charge, has too much distracted me from my studies and my duties towards my friends; then my everyday profession of teaching natural philosophy, and the administration of my family, the care of my relatives, many of whom depend on me, and other causes that it would take too long

¹²⁵ Only the strange addition of the superlative (*occupatissimus*) and of the comparative adverb (*magis quam*) reinforced the claim. The letter also emphasised there was little chance Gessner would provide anything to Aretius if no messenger happened to be going to Berne.

¹²⁶ On the discourse on memory and forgetfulness, see Gadi Algazi, "Gelehrte Zerstretheit und gelernte Vergesslichkeit: Bemerkungen zu ihrer Rolle in der Formierung des Gelehrtenhabitus" in *Der Felhtritt: Vergeben und Versehen in der Vormoderne*, Peter von Moos (ed.), Cologne, Boelhau, 2001, 235-250.

¹²⁷ On friendship as a value linking the community members to each other, see Bots and Waquet, *La République des Lettres*, 1997. This passage also helps create an image of Gessner as disorganised, not only in his time management, but also in the management of his papers and space. Once more, it is an image he creates as well as a reality. This disorganisation only appears in the letters, less because it is not acceptable for it to appear somewhere else, than because letters offered Gessner a specific, intermediary space.

¹²⁸ Letter to Holtzach, 31.01.1562, in *Ep. Med.*, f. 85v.

to enumerate here, almost everything is holding me back from myself, not to say from my friends. (...) ¹²⁹

Here, Gessner set in opposition to his studies and his correspondence a list of occupations. The strict parallelism in the structure of the sentence reinforced the impression of overwhelming busyness. The strong adverbial sequence (then, and, and, summarised by 'almost everything'), the nominal designation of the duties – while one could have expected verbs of action, reinforcing the impression of business – based on the abstract words ('*munus*', the office, '*professio*', the profession, '*administratio*', the administration, '*cura*' the care, '*causas*' the causes), linked with gerundives insisting on the activity itself (*medendi*, *docendi*) or of genitives designating the people (*rei familiaris*, *propinquorum*) conceptualised and individualised each task in a coherent whole. Contrary to the narratives of his life one can also find in the letters, Gessner here did not discuss the activities themselves, but the workload and the fragmentation of life into a multitude of occupations.

These occupations were hierarchised. He usually quoted his public duties first: teaching, medicine – as a town physician – came before his publishing activities followed by his private duties as a paterfamilias.

You ask me to write more often: and I would wish it too, for many reasons: but I see no hope that this can be. What can I do, a physician, a professor, the publisher of many big books, the head of a family, etc.?¹³⁰

These successive reincarnations revealed the tensions experienced by Gessner both between his professional and scholarly activities, and between his public and private duties. The acknowledgment of a private life is in itself surprising. The change of habitus

¹²⁹ Letter to Guilandinus, *Ep. Med.*, f. 139v.

¹³⁰ Letter to Johannes Hospinianus, 03.10.1563, *Ep. Med.*, f. 103v. These kinds of presentation remained unchanged in Gessner's biographies, usually organised by profession or by discipline. It might be interesting to try to escape this organisation of Gessner's life, and I would argue that a study of the letters authorises exactly that move out of Gessner's fragmented presentation of his life.

diagnosed by Gadi Algazi was only beginning to take place, and wives were entering scholarly households.¹³¹ Coping with this change, as well as coping with public duties, was a source of tensions. Letters had thus a space for private information, for discourse about weddings and children, or for complaints about the conduct of his wife. However, private life always came last in the order of Gessner's occupations. In this hierarchy only the *topos* of the busy man did not admit of change, even when he was writing to one of his disciples.¹³²

I had proposed to come and see you this summer, very cultivated Fabricius, but the edition of my volume *On fishes*, which took longer than I expected, and the continued building work on my house has kept me occupied even now: that's why I have to defer it to another time.¹³³

Such enumerations substantiated his claim to having mastered all this knowledge and these tasks single-handedly.¹³⁴ The *topos* was thus one of the ways Gessner used to construct his universal figure. A scholar, a member of the Republic of Letters, it also gave a broad place to medicine and to his professions. Faced with sixteenth-century fears about the infinity of knowledge, he acknowledged it, and fragmented his life into a multitude of tasks, between private and public, night and day, publications and professional activities, Republic of Letters and town of Zurich.

This fragmentation of life, however, made it difficult for him to find the time to write to his friends. Here is the core subject of the *topos* of the busy man, an epistolary *topos*

¹³¹ Gadi Algazi, "Scholars in Households", 2004.

¹³² This order imposed by the *topos* of the busy man could also derive from an attachment to a form of civic humanism. The specific politico-religious system of Zurich, both related to the Holy Roman Empire and semi-independent, ruled by Reformators, gave civic responsibilities an important weight. See for instance Bruce Gordon, *The Swiss Reformation*, Manchester, Manchester University Press, 2002 (first published 1962).

¹³³ Letter to Johannes Fabricius, 02.08 s.a., *Ep. Med.*, f. 93v.

¹³⁴ As can be seen from the letters to Zwingli and later to Bullinger, as well as from the dedicatory letters Gessner wrote, letters had a fair share in the patronage trade. Defining himself as a busy man was for Gessner a way to assert his freedom from / his deprivation of patronage, as did his repeated (although unfounded, as we shall see) claims that he had no secretary or copyist to help him.

used to apologise for not writing a letter when letter writing was a necessary qualification both for a member of the Republic of Letters and for a professional learned physician. A central argument in the letter to Bullinger, as we have seen, was that Gessner benefited from letters from important physicians, called in to bear witness of their high regard for him.

The list of his obligations often contains mentions of writing letters, exactly on the same level as other occupations. When the town physician of Zurich wrote to Johannes Cosmas Holtzach, his Schaffhausen counterpart, he even listed letter writing as an excuse for not writing:

My daily Greek teaching of Aristotle, some publications, my patients and moreover letters to write constantly to a variety of regions divert me from writing to you.¹³⁵

Epistolary practices, as demonstrated by Svetlana Alpers,¹³⁶ were an integral part of the representations of the scholar as understood by sixteenth-century scholarly world. To be a scholar, one had to be a correspondent, and to be a physician, one had to be able to write letters.

Section 3: Epistolary practices

By featuring letter writing as one of the tasks of his fragmented existence, Gessner established it as a scientific practice in itself, standing on its own feet.¹³⁷ It had its own

¹³⁵ Letter to Holtzach, 15.11.1560, *Ep. Med.*, f. 83v.

¹³⁶ Svetlana Alpers, *The Art of Describing, Dutch art in the seventeenth century* Chicago, University of Chicago Press, 1983.

¹³⁷ See also, for instance, how Gessner balanced, in a letter to Occo, letter writing and sharing in a printed controversy with Pietrandrea Mattioli: “That is why I have chosen to defer [my answer] to my *History of plants*, where I will however simply deal with the facts themselves, and not struggle against any one by name, if I am still alive and have leisure for this. Which now I utterly lack, to the point that I have absolutely no time for my lucubrations, nor for writing to my friends, as I would like.”, Gessner to Occo, s.d., *Ep. Med.*, f. 47r.

codes – among which the use of the *topos* of the busy man – its own tongue – a mixture of Latin, Greek and German¹³⁸ – and language – mostly defined by brevity, in Gessner's case. Finally, it had its own material constraints. Historians tend to consider the letters as a voice coming from the past. But this voice and its effect were largely determined by material elements. In this section, I will attempt to browse briefly through the circumstances that heavily weighed on epistolary communication. The environment, cosy or rough, in which the letter was written, made the letter more or less hasty and changed Gessner's handwriting. On an ill-shaped or borrowed pen, on the time of the day and the light in the room depended its degree of legibility.¹³⁹ Gessner did not seem to allocate to a specific moment the tasks related to his correspondence. Writing letters, at least, could take place late into the night, justifying the absence of proofreading by the necessity of closing his sleepy eyes,¹⁴⁰ or just after lunch, as on 29 November 1562, when he concluded a letter to Johannes Crato in these words:

And forgive my haste: I have received your letter around lunch, and answered immediately after, and did not proofread my letter.¹⁴¹

¹³⁸ The surviving letters are mostly in Latin, probably because most of them are addressed to scholars. In German, Gessner wrote a number of *consilia*. We also have found eleven letters in Greek written by or to Gessner and one letter in Hebrew by Johannes Frisius, annotated and apparently corrected by Gessner (ZBZ MsC50a 263). Most letters, however, are not monolingual but mix happily German, Greek and Latin, according to the subject. The specific use of each language would deserve a study in itself, but it seems that letters entirely written in Greek or in Hebrew carried as well as news the idea that letter writing should remain a training tool.

¹³⁹ Gessner, for instance, reproached Conrad Forer for his handwriting, Gessner to Forer, s.d., *Ep. Med.*, f. 125v.

¹⁴⁰ As in a letter to Funck dated 21 January 1564, for instance. (« conjugent oculi, nimia jam nocte » *Ep. Med.*, f. 96r). However, no specific time of the day was devoted to letter writing.

¹⁴¹ Letter to Crato, 29 November 1562, *Ep. Med.*, f. 3v.

Postal services

Gessner's haste in composing his answer was not only caused by his admiration for his correspondent. The presence of an adequate courier certainly trumped considerations of decorum, and legitimated the urge. Writing letters was largely related to sending them, and to the appearance, or not, of a reliable messenger. He could be a friend, travelling from Zurich to other places¹⁴² – or a student, who would, in exchange for a recommendation, carry a letter, or a bunch of letters and distribute them on his way.¹⁴³ Zurich was placed at the crossroads of the main trade and mail routes to France, Italy, Germany and Eastern Europe. Merchants also organised postal services: those of St. Gall, allied to merchants in Zurich, Basle and Berne, maintained a postal route to Nuremberg, via Lindau, at regular intervals (every two weeks, on fixed days). Besides this Nuremberg route,¹⁴⁴ another well-established one was that to Lyons, connecting St.Gall, Winterthur and Zurich to Lausanne, Geneva and Lyons, every two weeks. Merchants from Basle also opened postal routes, especially the Gotthard post, which linked Basle to Milan via the St. Gotthard pass, and the Thurn und Taxis Company circulated letters and goods throughout the Holy Roman Empire.¹⁴⁵

These big postal enterprises did not yet have a total monopoly: individual merchants also carried letters for particular clients. Perhaps the most important, for Gessner, was the mail of Christoph Froschauer, who had regular exchange with other Confederate cities. To the printer, he entrusted letters when they included books, or merely the books themselves,

¹⁴² Thus, for instance, Johannes Funck, a frequent traveller between Zurich, where his mother lived, Memmingen, where he was a physician, and Augsburg.

¹⁴³ Gessner's *Liber amicorum* is filled with the names of such students. See Chapter 3.

¹⁴⁴ Zurich merchants had used it in the 15th century.

¹⁴⁵ For a history of postal services, see Arthur Wyss, *La poste en Suisse. 2000 ans d'histoire*, Payot Lausanne, 1987.

while the letter circulated another way.¹⁴⁶ Similarly, he could use the regular courier between Zurich and other cities.¹⁴⁷

The huge number of postal possibilities did not, however, prevent a considerable waiting time before a letter could be sent. When no carrier was at hand, the writing of the letter could take days, producing long epistles with additional post-scripts explaining the circumstances of the sending. Moreover, using several means of transport also often meant that a letter could overtake another. Finally, these multiple possibilities did not prevent the loss of letters. Sometimes, a messenger would simply not reach his original destination, or lose the letter on his way, or even deliberately destroy it. On 21 January 1564, for instance, Gessner wrote to several correspondents to deplore the loss of his previous letter, because the courier had destroyed them:

See how unfortunate I am: I wrote to you fourteen days ago, and could not find the messenger I expected. Eight days ago, someone arrived, promised he would come back soon, and deceived me. Then, a third one appeared, at the house of the mother of our dear Doctor Funck, who entrusted him with my letters, as he was going to Lindau. But this man, led by I don't know which fancy, went another way, and after he travelled one mile, opened both the fascicules of letters he had received (indeed, I had also written to the erudite Doctors Julius and Crato in Court), and threw them away half-cut into pieces. Their fragments have been handed over to the priest of a neighbouring village, who recognised my hand, and sent them back to me by a proper messenger. Three letters were almost completely destroyed, others returned to me in an extremely bad state, as you can see from the one addressed to you, which I send both as an excuse for my lateness, and to be pitied by you. So that you can read it, I have filled the passages cut into pieces in the margin.¹⁴⁸

The tribulations of the letters, from the scarcity of messengers to the act of vandalism perpetrated on them, their in extremis recuperation, the detective work of the priest and the re-writing in margins and on a new letter, illustrate very well how complex and circuitous an epistolary exchange could be. Epistolary communication was an

¹⁴⁶ See for instance, in a letter to Occo dated 27.08.1565, how Gessner organised the circulation of letters and books with Froschauer's mail. (*Ep. Med.*, f. 75r)

¹⁴⁷ The way the choice of a messenger influenced the contents of the letters is examined in Chapter 3.

¹⁴⁸ *Ep med*, ff. 31v-32r

incessantly interrupted dialogue, not only because correspondents were busy, but also because it involved a third party: carriers. They were not merely rare; they could be unreliable and cause severe delays in the correspondence. Political and religious circumstances could also block out an exchange for months, or even years. Epidemics, wars would seriously slow down the relationships with foreign countries. For example, a letter for Girolamo Cardano, sent in July 1553 from Zurich, reached its addressee two years later in Milan, due to a sanitary blockade of the Italian city.¹⁴⁹

Interrupted dialogues and group mailing

With such interruptions, the main purpose of many beginnings and ends of letters was to elicit an answer or to reinstate the discussion with the correspondent, by stating which letters Gessner had received, and to which he was replying. The dialogue had thus both a continuous and a fragmented character, which was, in some sense, parallel to the continuous occupations and fragmented life of the author of the letters. Letter writing thus seems to escape the polarisation and the tensions between night and day, private and public, publications and medical profession.

This had several consequences. First of all, a letter was not necessarily written on the spur of the moment, when a messenger was there.¹⁵⁰ Instead, it is highly probable that Gessner wrote some of his letters beforehand, and then waited for a courier, a merchant, and a friend to come. The close relationship we suppose letters had with everyday life was thus slightly distorted, and one can imagine the writing of the letter not as the sudden outpouring of feelings and ideas, but as the result of several layers of time and thought, the

¹⁴⁹ Charles Salzmann, "Ein Brief von Gerolamo Cardano an Konrad Gessner 1555", *Gessnerus* 13 (1956), 53-60. In times of plague Milan blocked the transport of goods to, from and through its territory.

¹⁵⁰ Actually, this is rare enough for Gessner to note it particularly (see in a letter to Jean Bauhin, 15.02.1565: "Cum tabellarius ad nos occurisset, arrepto calamo scribere aliquid volui." *Epistolae*, 1591 p. 138).

careful record of events in the prospect of a later sending – even when the final letter looked like a rough draft.

The second consequence was that Gessner may have concentrated his epistolary activities during a few days a week, probably when he expected a courier to be available. Therefore, among the few letters that still exist, many were composed in groups. In the space of three days, between 27 and 29 August 1565, the Zurich scholar wrote to Johannes Kentmann (in Meissen), Joachim Camerarius and Muralte (in Nuremberg), Adolf Occo and Johannes Funck (his relay to Augsburg), Theodor Zwinger in Basle and Hans Willem Stucki in Tübingen. Similarly, he excused a brief letter to Jean Bauhin by these words:

I am forced to write to you more briefly than I would like. Indeed, many other things are pressing, and I wish to answer the two or three letters written to me by M. Dalechamps, which I have not yet answered. And yesterday evening, a messenger came with a very long letter from M. Georg Aemylius, who is a Theologian and a preacher in the Hercinian forest (perhaps one hundred miles from us) and a very keen student of plants, so that he would describe many plants in an elegant poem, and I have to answer his letter and those of another man today.¹⁵¹

The remote location of the correspondent, as well as delays due to Gessner's busyness, made letter writing a mass practice: letters were not written alone, but one after another, which often caused repetitions.¹⁵²

A third consequence derived from the delays thus experienced by the correspondence. The epistolary dialogue was constantly interrupted: letters had to wait – for a convenient time to be written, for a messenger to come, and then to reach his

¹⁵¹ Letter to Jean Bauhin, 12 December 1563, *Epistolae*, 1591, p. 134. These collective mailings were also related to the constant forwarding of letters. Achilles Gasser, for instance, with his strong links with Lindau, a mail cross-point, was generally included in these collective mailings.

¹⁵² This collective writing is echoed by the collective reading of letters. See Chapter 3.

destination.¹⁵³ At some periods, chances to get a good messenger were greater: the Frankfurt fairs,¹⁵⁴ for instance, where all traders and merchants would meet in spring and autumn. The number of letters written increased in January and February, just before Zurich merchants would leave for the fair. Gessner himself insisted on his excessive busyness at this period of the year, when writing, for instance, to Benedictus Aretius in early March 1562:

D. Lucas the Hungarian, whom you recommended to me, just left this morning, and was always with me during his stay: and although these days I have been extremely busy writing the letters I send to Frankfurt, we have charmed each other, as much as possible, by our various discussions.¹⁵⁵

The autumn fair also caused an overload of mail and letter writing:

Forgive the brevity of a very busy man: now I am writing innumerable letters to various regions because of the Frankfurt fairs.¹⁵⁶

Moreover, besides these seasonal irregularities, the circulation of letters itself was not fluid, nor was it regular: a letter between Basle and Zurich, two relatively close cities, could take between 5 days and 2 weeks. In his letter to Jean Bauhin, dated 24 October 1561, for instance, Gessner first answered a letter written in Basle on 21 July, then mentioned he had already sent his answer to an earlier letter to Lyons, and finally added:

I had already sealed this letter when I came upon the one you had written to me on 8 August from Geneva, and with which you had sent a spiny plant, called, according to you, *acanus* of Theophrastus by M. Constantin.¹⁵⁷

¹⁵³ It took often, moreover, several messengers, for a letter to reach its official addressee: letters were often sent first to a scholar in a neighbouring town, who then took care of forwarding them, thus expanding considerably the delays in the correspondence. On this question, see Chapter 3.

¹⁵⁴ On the importance of Frankfurt fairs, see for instance M. Rothmann, *Die Frankfurter Messen im Mittelalter*, Stuttgart, 1998.

¹⁵⁵ Letter to Benedictus Aretius, 05.03.1562, *Ep. Med.*, f. 117r. See also letter to Aretius, 01.07.1551, *Ep. Med.*, f. 114v.

¹⁵⁶ Letter to Hans-Wilhelm Stucki, 29.08.1565, *Ep. Med.*, f. 124v.

This sort of complicated situation, in which there was no one-to-one correspondence between the letters sent and the letters received, was common, and necessitated a considerable amount of time and ink to establish clearly the state of the correspondence, what had been sent, and most importantly what had been received, and which letter one was answering.

In order to help the memory of the correspondent, Gessner used to write very plainly, simply following the different points in the letter he was answering. His letters thus gathered several discussions he maintained together, on totally independent subjects. Thus, a letter to John Caius treats successively the matters of medical springs, of the *Observations on Pliny* of John Claymond, of his own editions of Valerius Cordus' works, of various plants (Elleborine, the leaf of a tree (a plane tree), green oak, of several animals (of conches, of a marine dog), of some pictures, sent by Caius, of publications of Galen's works, of *tragelaphus*' horns, of *bucephalus*, of Caius' book on dogs, of Lynx, and several other subjects. Gessner's Latin, this time, did not follow the classic and ancient rule that prescribed that each sentence should be grammatically linked to the next one. On the contrary, the absence of grammatical link between sentences created separate blocks, which made each subject independent. The epistolary dialogue was thus not a mere conversation: each subject received a separate treatment, and a single letter could cover several continuing discussions, which independently followed each other, from one letter to another. Similarly, a discussion could be reinserted in the letters of other correspondents, and thus, epistolary conversation was made of several voices, which sometimes crossed each other.

Other scholars used, in order to keep track of the state of their correspondence, to copy down every letter they sent.¹⁵⁸ Gessner did not do so for his regular and common

¹⁵⁷ Letter to Jean Bauhin, 24 October 1561, *Epistolae*, 1591, p. 103.

¹⁵⁸ Some of Gessner's letters survived thanks to this practice, for instance letters sent to Gessner by Jean Ribitt, in Lausanne, BNF Lat 8641.

correspondence: only letters with a strong political or scientific element were kept, in draft or in a copy.¹⁵⁹ Instead, he simply annotated the correspondent's letter with the date and means of his answer, or marked them with a crossed S signifying he had fulfilled his corresponding duties and answered. This method, however, was not completely reliable, and he sometimes found it difficult to remember whether he had answered a letter, or not: he for instance wrote to Johannes Cosmas Holtzach:

I truly thought I had answered your last letter – too many occupations have confounded my memory to that point – from which occupations I got a rest, today, and, while organising confused papers in my Museum, I find your letter and (what a surprise) without the sign I use to mark those I have answered.¹⁶⁰

Here, the image of the chaotic mind of the scholar is mirrored by Gessner's chaotic 'museum' – what we could call his study.¹⁶¹ There, letters were probably read and written, and obviously kept in the middle of many other papers – more or less in order.¹⁶²

Letter-reading

Gessner's way of annotating letters mitigated this disorder and made finding the contents of a letter easy. He actually read letters as he would have done a book.¹⁶³ In the

¹⁵⁹ For instance letters sent to Mattioli, Donzellini and Hess in the course of the controversy over the true *aconitum primum*; to Fuchs on questions related to the edition of pictures and to Gessner's project on plants; to Johannes Placotomus for a *consilium*; to Melchior Guilandini... These letters, except those on the *aconitum primum* controversy, all featured in Wolf's edition of Gessner's *Epistolarum Medicinalium libri III*.

¹⁶⁰ Letter to Holtzach, 31.01.1562, *Ep. Med.* f. 85v.

¹⁶¹ For a description of Gessner's study by himself, see Letter to Didymus Obrecht, 18.03.1560, *Ep. Med.*, f114v-115r. Simler also reported details on the study in his *Vita Conradi Gesneri*, f. 17v. Why Gessner called it a *museum* is certainly an interesting question, as it is the place where letters were, most probably, read and written, the theatre of the epistolary practice. Moreover, a museum was also a place where 'intellectuals' met, a function other scholars had emphasised, like Georg Sturz in Erfurt in the early sixteenth-century (fl. 1514-1526). See Chapter 6.

¹⁶² On the consequences of this after-life of letters, see Chapter 6.

¹⁶³ Gessner's books generally bore the same two kinds of notes: marginal *tituli* and general notes on the title page of books. These two sorts of notes are the main ones Ann Blair indicates as characteristic of early

margins, titles summarised the contents of the letter or its argument. On the envelope or on the back of the letter, a longer set of notes generally insisted on what seemed most interesting to him and summarised the material content of the letter, and especially the date of the answer. Thus, a manuscript letter of Guglielmo Gratarolo¹⁶⁴ bore marginal *tituli* summarising its contents: news about several publications (Gessner's *Moschion*, the slow printing of Gratarolo's *Petrus Pomponatius*), a manuscript parchment possessed by Gratarolo and entitled *De substantiis*, and a project for a book entitled *Vera Alchymia*, with a list of its possible contents. A last note "o" was added next to the final sentences of the letter, where Gratarolo asked for an answer. Gessner's marginal titles are those of a good student: they simply state the subject, without any indication of his ideas and feelings on the various points.

modern notetaking practices in "Note-Taking as an Art of Transmission," *Critical Inquiry* 31 (2004), pp. 85-107.

¹⁶⁴ Gessner to Gratarolo, 30.07.1556, ZBZ MsF60.87.

The envelope tells us another story: that of what Gessner wanted to keep and find easily, i.e. the *Pomponatius* printed by Heinrich Petri, and the two manuscripts described by Gratarolo.

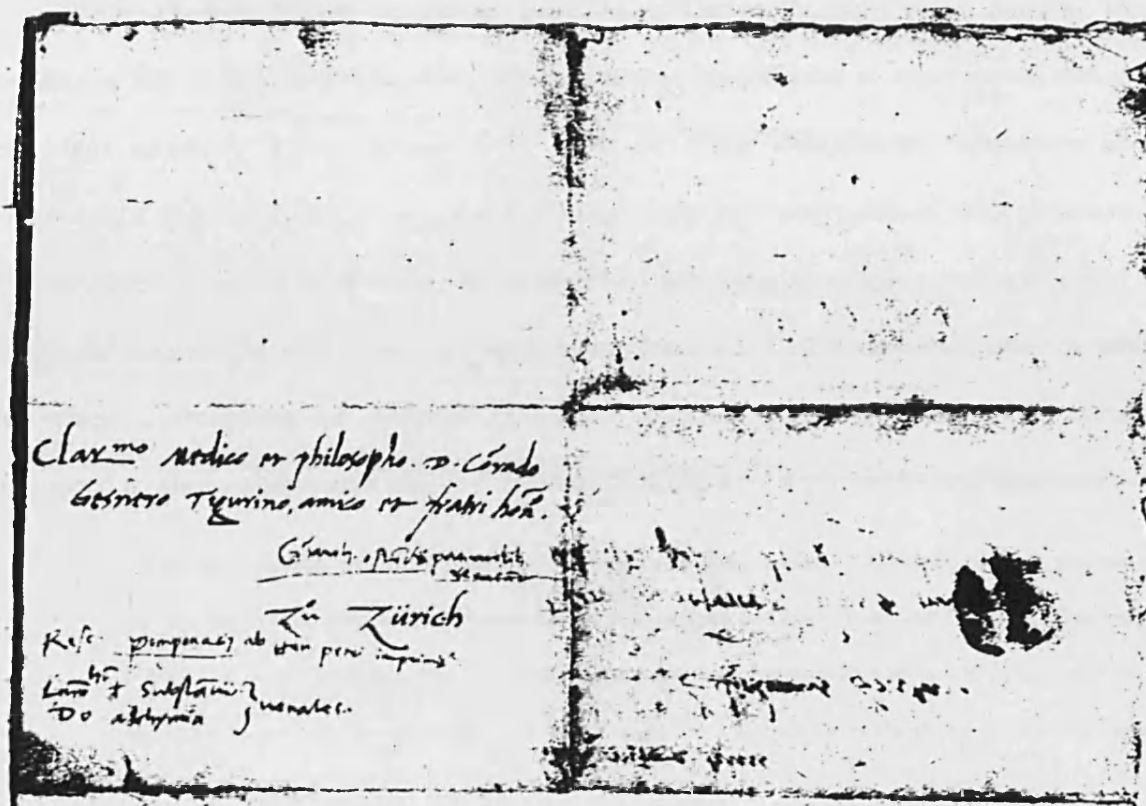


Figure 5: Envelope of Gratarolo's letter (ZBZ MsF60.87)

Letters were thus read at least twice. First, a written reading accompanied the personal oral or silent reading of the letter. In a second and later move, Gessner summarised the most important points on the back or on the envelope, certainly for further reference. These back notes were also, often, a space where he could associate the contents of the letter with another text or information. For instance, a development concerning medical thermal springs in a letter from Apollinaris Buchkhard was matched by a note almost equivalent in length on the envelope, and associated with an experiment

made by Gessner against dropsy.¹⁶⁵ On the back of the envelope, he scribbled “Circa Basileam et Salodorum”, a note indicating that the letter was probably kept in order to complete his work on Thermal Springs, and classified by provenance.

While reading letters seems to have been Gessner’s own duty, writing them sometimes fell to someone else. Several amanuenses helped him to copy down the most important missives. These young men, most of them anonymous, deserve a short paragraph, if only because Gessner and his biographers constantly denied their presence. It was however a common practice, for established scholars, to employ younger ones for secretarial duties. The recruitment of such young men was a delicate affair, one for which the whole correspondence network could be solicited. Thus, in June 1563, Gessner attempted to find an adequate helper for Johannes Culmann, a physician in Gippingen:

I have been unable to find a young boy of not more than twelve or thirteen, such as you ask for in your last letter, who would at least be suitable to read and copy your handwriting. If, however, I find one, I will let you know in another letter; I would rather that you would look for yourself around you, as I do not know anyone well enough, and to believe in another’s recommendations is not safe enough.¹⁶⁶

The simple fact that he was requested to find a boy for Culmann indicates that he was a recognised expert in such choices. The manuscripts in the *Thesaurus Medicinae Practicae* indicate that he used at least three secretaries, whose hands are easily recognisable, and who apparently copied down some of his letters as well. In a letter dated 8 April 1565, he had certainly overcome his doubts about other people’s recommendations, as he asked Theodor Zwinger to look for someone for him:

Finally, I want to know from you whether I could find in your city some young man or adolescent averagely learned, interested in medicine, poor, modest and good; who would zealously employ himself writing and copying for me; he could meanwhile listen to one or two

¹⁶⁵ Gessner to Buchard, ZBZ MsC50a38.

¹⁶⁶ Gessner to Johannes Culmann, 25.06.1563, *Ep. Med.*, f. 45r.

public lectures, and, into the bargain, would get food and housing and everything else at my house. I cannot meet the needs of my works for publication, the more learned the young man is, the better he would suit me. If you find someone, let me know what he is like, how old and learned, and when he would come, if I asked him to.¹⁶⁷

The exacting qualities required by Gessner – young, poor, zealous and learned – seem to have been united in Adrianus Chortander, a young man from Basle he mentioned in a letter to Jean Bauhin, dated 7 July 1565.

The descriptions you gave me – for which service I will one day show my gratitude – were already described for me by Adrianus Chortander, whom you know and who is now with me and helps me to organise the rest of the material for my *Historia Stirpium*.¹⁶⁸

Beyond the fact that he had helpers, however, the existence of his amanuenses reveals how letter writing had become by the second half of the sixteenth-century an industry. Letter writing was a time consuming practice. But a large part of the work was not to write the original, or the drafted letter: it was, whenever the letter reached a state beyond that of the shopping list or the private and intimate discussion, whenever controversy or dissemination of knowledge were involved, whenever the correspondent had a higher status than oneself, to ensure that the original draft could be copied and the letter circulated in good shape. The pedagogical dimension of letter writing, or copying, thus culminated with the codes related to the status of the correspondent. These codes were subtle: thus, Crato von Krafftheim once wrote to Theodor Zwinger to apologise for not having written the letter in his own hand.¹⁶⁹ They involved a common understanding that a letter was sometimes also the product of a third party's work: a young man, who perhaps

¹⁶⁷ Gessner to Theodor Zwinger, 08.04.1565 *Ep. Med.*, ff. 111v-112r.

¹⁶⁸ Gessner to Jean Bauhin, *Epistolae*, 1591, p. 154.

¹⁶⁹ This letter can be found in Frank Hieronymus, *Theophrast und Galen – Celsus und Paracelsus. Medizin, Naturphilosophie und Kirchenreform im Basler Buchdruck bis zum Dreissigjährigen Krieg*, Publikationen der Universitätsbibliothek, Nr. 36, Basle, Universitätsbibliothek (distributed by Schwabe AG), 2005, 1379-1381. I am grateful to Vivian Nutton for pointing this out to me.

did not understand every thing that he was copying. They inscribed letters in the blurred space between intimacy and publicity.

The features of epistolary culture thus made letter writing and letter-reading a complex, learned practice, in which reading and writing habits inherited from humanists shaped the features of early modern scientific and medical knowledge.

Conclusion

Gessner's letters were, as we have seen, at the centre of his life, or lives. A learned physician, he had to accommodate the requirements of his profession, as well as those of his scholarly calling. Throughout his life, letters accompanied his attempts and his adjustments to these requirements. They were at the core of his humanist training: a space where he could not only practise Latin and find his own style –and perhaps his own self – but also forge strong relationships and practise diplomacy. They were also the tools of his medical profession: for many of his patients, he wrote consultations by letter, thus leaving a trace of his name and excellence as a physician. They were, finally, at the heart of a system of circulation of information, which made his publications possible, whether on books, on medicine, or on the natural world. They projected, all around learned Europe, the name and self-portraits of Gessner as a man of few (epistolary) words, but of many thoughts; as a busy man, as well, busy thinking, healing people and writing books, but also busy writing letters. In sixteenth-century culture, letters had truly become a scholarly practice in themselves. They were part of a scholar's self-presentation, and they gave their rhythm to his days and his nights, their tune to his scholarly or intimate conversations, their sound matter to his observations and thoughts. They were what knowledge was made of. They also were the main link to other scholars, those who were like him and thought like him.

CHAPTER 3: THE EPISTOLARY TRADE:

CORRESPONDENCE AND MATERIAL EXCHANGE

Introduction

In the preceding chapter, I have examined how letters shaped and fashioned the identity of Gessner as a physician and as a scholar, both by describing him as conforming to an ideal of scholarly life and exchange, and by being in themselves a scholarly practice. This chapter* turns to the role played by letters in the elaboration of knowledge and scholarship as social practices and as communication tools between scholars. Over the last few years, historians of the sixteenth century, of science and of medicine, have attempted to redefine sociabilities based on epistolary relationships. Focused either on the Republic of Letters¹⁷⁰ or on specific forms of scientific exchange, such as collections or museum,¹⁷¹

* Other, shorter and preliminary versions of this chapter have been presented in Lyons, 2003 ; Cambridge (BHS, 2005) and Ghent (ESF Workshop, 2006). Parts of this chapter were published in the 2003 Conference proceedings, « Une correspondance scientifique à la Renaissance : Les *Lettres Médicinales* de Conrad Gessner », in *Réseaux de correspondance à l'âge classique (XVIe-XVIIe siècle)*, Pierre-Yves Beaurepaire, Jens Häselser and Antony McKenna, Publications de l'université de Saint-Étienne, 2006. A paper, soon to be published in *History of University*, also bears on these contents.

¹⁷⁰ See for an introduction, H. Bots and F. Waquet *La République des Lettres*, Paris, Belin, 1997. On letters being taken for granted, see for instance "Introduction" of Christiane Berkvens Stevelinck, Hans Bots et Jens Häselser (eds) *Les Grands intermédiaires culturels de la République des lettres. Etudes de réseaux de correspondances du XVIe au XVIIe siècles*, Paris, Champion, 2005. The use of the terms *respublica litteraria* is well attested for the sixteenth century. The first known occurrence is in a letter from Francesco Barbaro to Poggio Bracciolini in 1417. This letter can be found in Francesco Barbaro, *Epistolario*, II, *La raccolta canonica delle "Epistole"*, C.

most of them have treated correspondence as a given, a simple means of getting access to natural objects or of communicating, without examining its specificities. On the other hand, studies of correspondence networks have generally focused on individuals, centres of networks, thus erasing the multiple layers of the scholarly ‘community’.¹⁷² None of these studies, however, has attempted to examine how the specificities of the epistolary form and of epistolary communication shaped correspondence networks.

Around the middle of the sixteenth century, correspondence was well established as one of the means of communication between scholars, who, despite being relatively mobile, could not meet everyday. Ensuring collaboration and exchange of ideas, but also of objects and food for thought, correspondence created a space of discussion and exchange just as monasteries, universities or humanist circles had formed earlier. It was a space with constraints of time and money: those of mail circulation, of busyness, of the heavy costs linked to the circulation of goods. It also assumed a personal and intimate relationship between the correspondents, ‘a conversation with an absent friend’, but, at the same time, ran, willingly or unwillingly, the risk of being publicised, or even published, for a broader audience, that of books or that of other scholars. The aim of this chapter is to understand

Griggio (ed), Florence, 1999, pp.71-75. There is no occurrence in Gessner’s letters, but the editor of his correspondence Caspar Wolf (see *Ep. Med.*, Preface, sign α2r) employed it.

¹⁷¹ One outstanding attempt has been made by Paula Findlen, who devoted a whole chapter of her *Possessing Nature* to “Pilgrimage of Science”, botanical travels and expeditions, as well as to the numerous trips to the marketplace accomplished by dedicated naturalists, but she, like most other scholars, took the use of correspondence for granted (Paula Findlen. *Possessing Nature: Museums, Collecting , and Scientific Culture in Early Modern Italy*. Berkeley: University of California Press, 1994).

¹⁷² See for instance the monumental *Hallers Netz. Ein europäischer Gelehrtenbriefwechsel zur Zeit der Aufklärung*, Martin Stuber, Stefan Hächler and Luc Lienhart (eds), Basle, Schwabe Verlag, 2003; Laurence Brockliss, *Calvet’s Web. Enlightenment and the Republic of Letters in Eighteenth century France*, Oxford, Oxford University, 2002; and Emma Spary, *Utopia’s Garden. French Natural History from Old Regime to Revolution*, Chicago, University of Chicago Press, 2000, Chapter 2 “Acting at a Distance: André Thouin and the Function of Botanical Networks”, pp. 49-98. Only *Hallers Netz* attempts to explore the materiality of the exchange network, and how correspondence shaped its functioning and its structure.

how the specificities of correspondence as a social space of scientific or scholarly interaction shaped sixteenth-century scholarly exchange in its social, scientific and material form.

Section 1: Collective ideal, located nature: Gessner's correspondents and the Republic of Letters

Correspondence and collective endeavour: the discourse of the Republic of Letters

A collective ideal based on collaboration.

During the sixteenth century, scholars suddenly experienced a considerable expansion of their world. The recent discoveries of the New World had brought into light numerous species of animals, plants, and society unknown until then. Trade, opening routes throughout the world, brought back to Europe products of the Far East. Meanwhile, the multiplication of books due to the development of print made an increasing mass of information available. This sense of an 'overload of information'¹⁷³ caused scholars to devise new scholarly practices. Indexes, catalogues helped ordering and making sense of the growing amount of knowledge and of data. But this realisation also forced them to adjust their hopes of a total, exhaustive knowledge of the world to the possibilities and outreach of one isolated, single scholar. "One man is no one" Gessner admonished Leonhardt Fuchs in 1556:

¹⁷³ A recent issue of the *Journal of the History of Ideas* was focused on the early modern way of "Coping with the Information overload". *Journal of the History of Ideas*, 62 (2003), especially Daniel Rosenberg, "Introduction: Early Modern Information Overload", pp.1-10, Ann Blair, "Reading Strategies for Coping with Information Overload, ca. 1500-1700, pp. 11-18 and Brian W. Ogilvie, "The Many Books of Nature: Renaissance Naturalists and Information Overload", pp. 29-40.

Indeed, there is an infinity of species of plants, and a large part of them must remain unknown to individuals, because of the diversity of regions. But if each one would put in common his own observations, one might hope that one day, a book would be made of all books, and a colophon added to it. I wish it could happen in our century, but dare scarcely hope it.¹⁷⁴

The first and foremost consequence of this feeling of ‘overload’ was thus the assertion of the necessity of collaboration. Gessner was not the only one to insist on knowledge as the result of a collective endeavour.¹⁷⁵ Collaboration was such an established part of the discourse on knowledge that it could be used, as a *topos*, against those who were too ambitious. If Gessner reasserted the need for collaboration between scholars, it was to answer Fuchs’ unreasonable demands that he should refrain from publishing on plants. In 1556, indeed, Fuchs was apparently revising his *Historia Stirpium*,¹⁷⁶ and did his best both to get access to Gessner’s own pictures of plants, and to keep the botanical publishing field to himself:

But you would like others to send you their observations: and may many do it, and help your great and very fine efforts, and I would do it as well very happily, if I did not have so many, if they were properly described and if they could be of any use to you. Because then, I would have no doubt that, your erudition and judgment having been exercised to such an extent and for so long in these subjects, you would be able to use them rightly. But I have many varied observations, noted down on numerous papers, rather than described in a more convenient form, in such a way that they could only be used by me; and I don’t have the time to write them down properly. And I have perhaps more in my head than on paper. [...] Please allow me my freedom, and my pleasures. I don’t know when I will publish something on this subject [...].¹⁷⁷

¹⁷⁴ ZBZ Ms C50a20, printed in *Ep. Med.*, f 137v.

¹⁷⁵ Brian W. Ogilvie, *The Science of Describing. Natural History in Renaissance Europe*, Chicago and London, The University of Chicago Press, 2006. Chapter 1 pp. 51-53, gives instances of this discourse among naturalists. See also, for a later period, Adrian Johns, “The ideal of scientific collaboration: the ‘man of science’ and the diffusion of knowledge”, in *Commercium litterarium : la communication dans la république des lettres, 1600-1750*, Hans Bots and Françoise Waquet (eds), Amsterdam, APA-Holland University Press, 1994. pp. 3-22.

¹⁷⁶ Leonhardt Fuchs, *De historia stirpium commentarii insignes*, Basle, Isengrin, 1542.

¹⁷⁷ ZBZ MsC50a20, printed in *Ep. Med.*, ff. 137v-138r.

Gessner's refusal defined two levels of collaboration: a collaborative attempt at knowledge based on an exchange of correspondence and material, and another, on the accumulation of books on similar subjects. Were he ready to share his material with Fuchs, it would be in its printed form. The public space of the Republic of Letters, populated with authors and readers, and the 'private' space, or the preserve of correspondence and of the personal collection were two different spaces. Despite this, by the middle of the sixteenth century, knowledge could only be obtained through an exchange with others, and this exchange often took the form of correspondence.

Epistolary exchange was an effective way to collect material and information on nature and medicine, one to which scholars resorted easily, and responded well. Letters were traditionally one medium for the circulation of truth within the boundaries of the learned 'community'. They maintained communication between separated scholars. They thus constructed a space that could speak both to the collective ideal of the sixteenth-century Republic of Letters and to the individual relationship on which the ideal of friendship was based.

That Gessner should have relied on correspondence and external helpers for the advancement of his studies is thus not merely symptomatic of his unfailing good nature and optimism. At a time when a scholar was expected to confine himself for the most part to his own library and to a solitary face-to-face with books,¹⁷⁸ but also when the struggle for patronage made scholars keener to promote their own name than to quote others, it denoted an eager attention to the collective and collaborative discourses directing the making of knowledge, but also a clear awareness of the difficulties raised by the realisation that things of nature were located individually, at a moment when knowledge, to be good, had to be exhaustive.

¹⁷⁸ See Gadi Algazi, "Scholars in Households: Refiguring the Learned Habitus, 1480-1550", 2004 and Chapter 2.

Correspondence and collaboration

Gessner thus relied extensively on epistolary collaboration, when he needed to gain access to a specific object or information. His letters are full of solicitations, asking for plants, books and remedies. In 1545, for instance, he wrote to Boniface Amerbach, a jurist he had met during his studies in Basle:

That is why I am sending you a catalogue of the animals on which I write: although some are named here, for which I have yet no true representations, I hope that I will be able to procure them through friends, when I will have leopard, hyena, tiger, *uris*, bison, both the common roe deer and the one which carries musk, lynx, fallow deer, Indian or Pharaonic rat, which I consider to be the mongoose, and a few others which I see to it reproduced completely from life with their real colours. The parts of my *Historia* are the name in several languages, the description of the body of each of them, as well as their actions and habits, the remedies, their culinary preparation and some other things.¹⁷⁹

The request to Amerbach was, apparently, only partly successful. In fact, it was echoed, three years later, by another, collective call for helpers, with a similar list of pictures. In the *Pandectae*, Gessner listed the animals and pictures still missing from his *Historia Animalium*:

In our history, mention will be made of all [animals]: but we have, for the moment, only the pictures of those which are accompanied by an asterisk. That is why I ask all scholars from everywhere to send us the pictures of the animals we are lacking from their remote regions.¹⁸⁰

¹⁷⁹ "Quamobrem catalogum ad te mitto animalium, de quibus scribo: quamquam nonnulla ibi nominator, quorum veras effigies nondum habeo, spes autem est per amicos comparavi posse, ut leopardo, hyenae, tigridis, [uris], bisonis, capreoli tum communis, tum ejus qui moschum gerit, lyncis, damae: [muris] Indici sive pharaonis, quem ichneumonem existimo, et paucorum sane ad vivum cum suis coloribus depingi curo. Historiae partes sunt, nomina in diversis linguis, descriptio corporis singulorum et actionum [morum]que, etc; remedia, appara[tus] ad cibum, et alia quaedam." Letter from Gessner to Boniface Amerbach, UBBKiAr18a2.

¹⁸⁰ In *Pandectarum libri*, Zurich, Froschauer, 1548, f 221r-v, Gessner listed fifty animals for which he still needed a picture. Among these featured all those mentioned to Amerbach, minus the leopard and the bison. They were mostly exotics or Baltic mammals, thus highlighting the need for local contacts.

This broadened call indicates several important features of the method and actors of the elaboration of books of knowledge in the sixteenth century. Again, it relied on correspondence, clearly the most obvious way of getting access to objects, pictures and information on nature.

These individual and collective calls for help were, in the long run, relatively successful: by the time Gessner had completed the first tome of the *History of Animals*, in 1551, most of the missing pictures had been provided. By the time the corresponding *Icones Animalium* had been published, two years later, they were all there, sometimes in several versions.¹⁸¹ While the name of Boniface Amerbach did not appear in the long lists beginning each tome of the *Historia Animalium*, eighty-one others did. While four of them referred to people living in Zurich, most of the senders of pictures and information were probably correspondents.¹⁸²

Gessner's use of correspondents was not limited to his work on animals. In 1565, when he died, he left a collection of botanical paintings,¹⁸³ the material for the *Historia Stirpium* he had been planning ever since he had finished his work on animals, and perhaps even before. This time, there had been no published call for help. But, on many of the

¹⁸¹ *Icones Animalium Quadrupedum viviparorum et oviparorum*, Zurich, Froschauer, 1553.

¹⁸² One cannot, however, exclude the possibility that some might have sent objects via Gessner's local correspondents without writing a letter themselves. Sadly, the letters were lost in the process of the fabrication of the book, Gessner making, as we shall see, an extensive use of the cut and paste method. To the best of my knowledge, only one of the letters used by Gessner in his *Historia animalium* is still to be found in manuscript, that of Johannes Ribittus on the fish called *umbra*, or *umbla* and it is in a 'main courante' and not the letter really sent, BNF, MsLat 8641 9v-10v. The picture accompanying the letter, and which actually the letter described, was probably printed in the *Icones Piscium*, f. 343. For a detailed study of the origin of pictures in the third volume of the *Historia Animalium*, see Katharina Springer, "*De avium natura*" von Conrad Gessner (1516-1565). *Die Illustrationen des Vogelbuchs*" Dissertation, Rostock University, 2007.

¹⁸³ An eight-volume facsimile of these pictures can be found in Heinrich Zoller, Martin Steinmann and Karl Schmid, *Conrad Gessner's Historia Plantarum*, Dietikon-Zurich, Urs Graf-Verlag, 1972-1980. Rudolf Steiger gave a list of the 131 senders and of the geographical origin of the plants in "Erschliessung des Conrad-Gessner-Materials der Zentralbibliothek Zürich", *Gesnerus*, 25 (1968) 29-64

beautiful watercolours, the name of the sender of the plant or of the picture was inscribed. Again, some of them lived in Zurich: Heinrich Bullinger the son, Josias Simler, Caspar Wolf, or even Gessner's wife, Barbara. However, many, in all likelihood, had sent the plant, its seed, or its picture, enclosed in their letters. This habit of epistolary collaboration also extended to medicine. Gessner frequently asked his correspondents to conduct experiments on a specific disease or a specific remedy. He also often asked for ingredients for his own preparations, especially for plants.

Collaboration thus took place at two levels. First of all, it was part of a discourse circulated via books and publications, which defined a Republic of Letters made of potential collaborators. But the main space in which collaboration took place was not the discursive space of the Republic of Letters: it was the correspondence, which defined another 'community',¹⁸⁴ based on access, granted or denied, to plants, personal collections, and information.

A trade of immortality

Both levels, however, were entwined. The call for collaborators in the *Pandectae* pushed forward a most convincing reason for helping out: the prospect of entering the printed world. Gessner had promised to quote names in his book.¹⁸⁵

¹⁸⁴ Using the term 'community' is here a little problematic. For a discussion of the term, or a definition, see Brian W. Ogilvie, *The science of describing*, pp. 50-86; Paula Findlen, "The formation of a scientific community: natural history in Sixteenth-century Italy", in Anthony Grafton and Nancy Siraisi (eds), *Natural Particulars. Nature and the disciplines in Renaissance Europe*, Cambridge and London, MIT Press, 1999). Peter Burke offers a brief discussion of the dangers of using the word 'community' in *Languages and communities*, Cambridge, Cambridge University Press, 2004, pp.5-7. I would argue that using the term 'community', or 'epistolary community' for correspondence supposes a world both more united and more exclusive than it really was. As we shall see, correspondence fragmented the world into reachable locations and the social space into individual relationships, as well as into different 'correspondence networks'.

¹⁸⁵ "Pro quo beneficio si nihil aliud praemii accipient, grata saltem ipsorum nominis commemoratione, in mentione illorum quae miserint, celebrabuntur" he wrote in his *Pandectarum libri*, 1548, f. 221v. Gessner, as far as I know, was the first one to begin his book with such an acknowledgment list, instead of the traditional

This was a tempting bargain. The fascination for the immortality of print was great during the Renaissance.¹⁸⁶ Gessner was already a well-known author. He had earned his reputation by quoting other people's names in his *Bibliotheca universalis*. Moreover, anything he wrote might well be (and indeed turned out to be) a book of huge consequence and audience,¹⁸⁷ and therefore conferred upon his correspondents and collaborators the immortality of the printed book. Gessner promised, and printed, a list of his contributors in the opening pieces of the first volume, just after the list of his printed sources. This first list certainly acted as an incentive for potential contributors, and it grew longer and wider with every new volume.

In exchange for this 'immortality', his new-found correspondents only had to submit to one condition – besides that of being learned readers of the *Pandectae*, at least in principle: they had to be located 'in remote regions' which certainly included Silesia, Poland or England.¹⁸⁸ As we shall see, the problem of locality was central both for the value of the information given in the books and for the structure of the correspondence itself. As Gessner had reminded Fuchs, what made collaboration necessary was not only the amount of data, it was also the difficulty of accessing them, "due to the variety of areas".

two general sentences of acknowledgments. As we shall see in the following chapters, such lists had also a legitimising function, that made the correspondent speak for himself and thus granted him responsibility or authority for it.

¹⁸⁶ Renaissance fascination for memorial in print deserves more attention. The growing importance of autobiographies (by Cardano, by Thomas Platter, close to Gessner, for instance) hints at it. Laurent Pinon, in *Les livres de zoologie à la Renaissance*, 2000, pp. 128-133 discussed the « immortality trade ».

¹⁸⁷ Perhaps the best proof is that, despite the difficulties of finding a printer at the time, Gessner apparently found one quite easily for every single book of his, including the most costly, although a number of them were commissions.

¹⁸⁸ However, many of them were, in fact, scholars from central cities of the Holy Roman Empire, or of the Helvetian Cantons. For a comparison between scholars living in central and remote locations, see below the map of Gessner's correspondence network (figure 6).

Locating nature, locating expertise: Centres and periphery

Mapping the territory

During the sixteenth century, a new view of nature was developed, in which the realisation that things had a location took on great importance. The discovery of the New World had, for instance, highlighted the degree of ignorance in which scholars found themselves if they were isolated: how could they know about animals, plants, and other wonders? Travel narratives took years to be printed, and often went without illustrations. The same insufficiencies applied to Ancient texts, in which so many existing plants were missing:¹⁸⁹ As Gessner wrote to Johannes Fabricius Montanus:

Clearly, as it is usual, regarding oceanic fishes, that we ignore the ancient names of many of them, because oceanic fishes are not described by the Ancients, but only those from the Mediterranean sea, which bordered the coasts of Greece and Italy; it is not surprising that something similar happens to us *regarding plants*: the authors mention very few alpine plants, and it is certain that they have especially mentioned those specific to their own regions.¹⁹⁰

If the Ancients could not depict plants outside of their own geographical location, neither could early modern scholars. Natural objects appeared in specific geographical settings,¹⁹¹ and no single man could get access to all of them. Granted, Gessner sometimes travelled to neighbouring German-speaking cities¹⁹² after his contract as a town physician was established. He had beforehand enjoyed a relative freedom of movement, as a student,

¹⁸⁹ See also the numerous attempts made by Gessner to find names for plants without an Ancient name, in Gessner to Occo, 3 April 1565, *Ep. Med.*, f. 73r and to Gasser, 31 March 1565, *Ep. Med.*, f. 42r.

¹⁹⁰ Letter to Johannes Fabricius Montanus, Ms C50a26, dated 2nd August, printed in *Ep. Med.*, f. 93v.

¹⁹¹ The appearance of animals on maps seems well anchored in the Middle Ages, for instance. But the use of animals as an ornament to maps seems limited to the exploration of margins: northern and eastern Europe. This, I think, hints at a growing importance of place in the understanding of nature. See for instance Wilma George, *Animals and Maps*, London, Secker and Warburg, 1969. I am very grateful to Axelle Chassagnette for these details.

¹⁹² In April 1559, for instance, he went to Augsburg, Stuttgart and Tübingen .

and visited France; he had also been to Italy in 1544, and especially to Venice, planned to go to Antwerp and Danzig¹⁹³ and enjoyed several long-lasting botanical expeditions in the Alps.¹⁹⁴ He spent, nonetheless, most of his life in Zurich. On the whole, he was certainly confronted by the comparative narrowness of his own experience, at a moment when he aimed, like most of his contemporaries, at a universal and encyclopaedic knowledge of nature.¹⁹⁵

There were several ways out of this dilemma. One would have been to limit himself to his own surroundings, a course some of his contemporaries apparently followed, writing a local and specific natural history.¹⁹⁶ However, Gessner's *Historia Animalium* covered most of the known world, including Africa and the New World, and his paintings pictured plants found everywhere in Europe, including Spain, but also in the New World. Collecting universal knowledge thus included reaching over to very remote, almost inaccessible locations.

¹⁹³ Gessner to Boniface Amerbach, 18 November 1545, UBB, MsKiAr18a2, p.188.

¹⁹⁴ For instance the one he made with Jean Bauhin in 1561, in the Alps (from the Grisons to Bormio).

¹⁹⁵ A large part of the natural history project was about getting a total knowledge of the world, or of drawing an inventory of it (Giuseppe Olmi, *L'inventario del mondo : catalogazione della natura e luoghi de sapere nella prima età moderna*, Bologna, Il Mulino, 1992.) Gessner's pretensions to universalism have been examined by Caroline Gmelig-Nijboer, *Conrad Gessner's Historia Animalium: an inventory of Renaissance zoology*, Meppel, Krips Repro, 1977, or Hans Fischer, « Conrad Gessner (1516-1565) as Bibliographer and Encyclopedist », *The Library* 21 (1966), 269-281. Although Gessner and his colleagues apparently believed in a finite number of natural objects, however, doubts about the possibility of a total knowledge of the world shattered their understanding of their own pursuits. See Chapter 5.

¹⁹⁶ According to Paula Findlen, natural history was generally practised within the reach of one's own experience, thus mirroring a tendency of natural history in general that would have gone from a general to a specific history, from a universal to a local natural history. (*Possessing nature*, pp 165-170) In Gessner's case, however, and I would argue, in the case of most of his colleagues, to be localised in one single area, if it was a drawback, did not lead to the privileging of a study of alpine plants. Indeed, as we shall see, although Gessner provided his correspondents with alpine plants, his own collections went far beyond his mountainous surroundings.

So did trade, in the sixteenth century. From all over the world, including the New World, merchants brought to Europe *naturalia* and artefacts. Gessner might have used, instead of correspondence, their numerous channels. There was, in the commercial city of Zurich, centrally situated on trade routes between Italy and Germany, between Eastern Europe and France, certainly no dearth of merchants, apothecaries and other itinerant traders willing to sell rare objects to a keen collector.¹⁹⁷ But, despite his insistence on the cost of his research on nature, he does not seem to have resorted to them in any extensive manner.¹⁹⁸

However, Gessner did not merely want to get natural objects from the whole world: he wanted them all.¹⁹⁹ This desire for exhaustiveness shaped his own collection. When he tried to lure the Strasburg physician Didymus Obrecht to Zurich, he immediately

¹⁹⁷ Apothecaries and merchants did not merely play a trading role in the circulation of objects of nature. Some were, themselves, collectors. In a slightly later period, Jan Swammerdam the Elder, an apothecary in Amsterdam, managed to gather a huge collection by visiting regularly the docks. [I am grateful to Hal Cook for this reference]. See also Pamela H. Smith and Paula Findlen, *Merchants and marvels: commerce, science and art in early modern Europe*, New York, Routledge, 2002, and the works of Florike Egmond.

¹⁹⁸ For instance, the provenance of his pictures of plants and of animals is generally stated, and does not mention merchants, except in the acknowledgements, which suggests money did not change hands. And if he deplored the death of a merchant from Augsburg during a trip to Egypt, (letter to Occo, 27.02.1563, *Ep. Med.*, ff. 24r-v) he apparently was not expecting to have any direct contact with him. However, this is not to say it was never a question of money. Actually, the links of Gessner with merchants seem to cover mostly his relationship with the Fugger family – and it was a patronage relationship –, with printers and with apothecaries and his use of itinerant merchants as carrier of letters.

¹⁹⁹ To use an anachronistic comparison, natural objects were, for Gessner, so many “Panini stickers”: the kind of collections that you want to complete, and not only a collection of curiosities. Such a mode of functioning obviously had consequences for the value of each object of the collection: getting access to rare plants became all the more important because they were rare, and necessary to the completeness of the collection, not only because collecting was a fashion and a trade. Meanwhile, a single specimen was not enough: Gessner, as he put it, wanted to make a choice between samples of the same plant: “Habeo quidem et ego multas aridas, et a D. Bauhino collectas omnes : sed grata est mihi optio inter duas aut plures ejusdem generis, cum in una fere inveniatur, quod alteri deest.”, Gessner to Felix Platter, 5 May 1565, *Ep. Med.*, f. 101v. This obviously complicated collecting practices.

articulated the multiple origins of his pictures of fishes with the presence of all and every species:

I wish that you were able to see me and my garden, as well as *myriads* of kinds of metals, stones, gems, and animals, innumerable pictures and the fifteen windows on which all the species of marine, fluvial and lacustrine fishes are very elegantly depicted on glass, etc, as well as several things that are useful for our art.²⁰⁰

This perhaps explains why Gessner was not content to deal with merchants, pilgrims and travellers. What he was after was not a collection of curiosities: it was a collection that he wanted to complete. Correspondence offered him a way to gain access to everywhere.

Locating the expert

Place mattered not only for the animal, but also for the observer. Correspondence provided Gessner with scholars who were mostly defined through their own place. Thus, when, on the recommendation of Thomas Erastus, he wrote to Buckhardus Mythobius, a physician to Duke Eric of Brunswick about pictures of fishes, he insisted on his own and his correspondent's exact location:

And he [Thomas Erastus] added that you possessed some rare pictures of animals, especially of aquatic animals from the Baltic Sea, that you had promised to communicate to me, if you had some means of sending them on such a long and important way [one illegible word], as I live in the heights of Switzerland, not far from the summits of the Alps and the springs of the Rhine, while you inhabit the faraway part of Northern Germany, in the famous city (if I am not wrong) of Minden, situated on the noble river Weser in the kingdom of the very famous Duke Eric of Brunswick. And I, delighted by your goodness, as I am preparing the edition of a catalogue of the German words for aquatic creatures, I have elected you as both its sponsor and its censor.

²⁰⁰ Gessner to Obrecht, 18 March 1560, *Ep. Med.*, f. 115r. A reproduction of the watercolours drawn for these windows can be found in Braun, 1990, pp.140-141.

Indeed, by means of your erudition you will be able to correct many things, and add a great deal.²⁰¹

Gessner's keenness to getting a local expert to assess his *Nomenclator Aquatilium Animantium*,²⁰² as much as, one might guess, his excitement at obtaining rare pictures of fishes, highlights the importance of local anchorage and experience in the understanding of natural history in the sixteenth century. He emphasised with precise details the geographical location as well as courtly and medical qualifications of his new correspondent. As Giuseppe Olmi has pointed out, a naturalist had to have "many friends in various places."²⁰³ Finding senders in places of difficult access, because of remoteness, dangers of travel, or even, as for Italy, religious reasons thus became a prime essential in collecting *naturalia* or artefacts. The same was true for medicine: accessing information on epidemics, for instance, largely depended on receiving news from other places, other cities.²⁰⁴ Correspondence was thus a way to impose a grid on the territories of natural history or medicine.

²⁰¹ "Et icones aliquas animantium raras, [Baltichi] praesertim maris aquatilium, te possidere adjecit, quas mihi communicaturum te sis pollicitus, si qua commoditas tanto tot itineris [intermedio?] mittendi daretur, cum ego in Helvetiis summis non procul summiis Alpibus et Rheni fontibus habitem, tu vero in remota ad Septentriones Germaniae parte degas, [Mindae] (ni fallor) civitate illustri, ad nobile flumen [Visurgis] sita apud Ericum illustrissimum ducem Brunsvicensem [degas]. Hac ego benignitate tua excitatus, cum hunc de Germanicis Aquatilium vocabulis editurus essem catalogum, te imprimis illius patronum simul ac censorem mihi delegi. Tu pro eruditione tua pleraque emendare, plurima adjicere poteris..." ZBZ Ms C50a27 f 216v. This is a draft written by Gessner on the verso of a letter from Gilbert Cousin of Nozeroy (Gilbertus Cognatus Nozerenus): although it is not dated, the letter can safely be placed between 1555 and 1560.

²⁰² *Nomenclator Aquatilium Animantium*, Zurich, Froschauer, 1560.

²⁰³ See Giuseppe Olmi, "Molti amici in varij luoghi": studio della natura e rapporti epistolari nel secolo XVI", *Nuncius*, 6 (1991), 3-31.

²⁰⁴ For instance, location was also crucial when Gessner dealt with 'secrets', these remedies that were passed from one empiricist to another, or to him, and that he in turn passed on to beloved colleagues under oath of keeping them secret (or sharing them with only a few friends). The problem here was not locating the thing, but the person who circulated it.

When he died, Gessner's 254 correspondents covered Europe from Caen and Agen to Warsaw and Prague, and from London, Utrecht and Rostock to Montpellier, Rome and Crete. They were able to access, directly or not, most of the plants on the Continent and from the bordering seas of Europe. From his central position in Zurich,²⁰⁵ Gessner could thus collect information from everywhere, and, as we shall see, pass it everywhere as well. This does not mean, however, that correspondents were evenly positioned on the map of Europe. They clustered in the Southern part of the Holy Roman Empire and in northern Switzerland, in towns like Augsburg, Basle, Strasburg, Tübingen, and, to a lesser extent, in Berne, Padua, London, Lyons, Paris. Much fewer still lived in peripheral areas such as Poland or Western France. Rarely, however, was a correspondent isolated in one city, however remote it could be.²⁰⁶ This double concentration, at the global level of the mapping of the territory in comparatively central and close areas of Europe and at the local level of the links between scholars within the boundaries of a city, is one of the characteristics of early modern correspondence networks, and one that comes, as we shall see, from the constitution of the network.²⁰⁷

²⁰⁵ I am not arguing here that Gessner was a centre in the Republic of Letters, although he probably was. Here, I use centre simply to indicate Gessner's geographical position. Gessner's problem was not just one of location, of a limited range of experience: it was a problem of access, to seas, to forests and wildernesses, and wild life from Eastern Europe to the New World via the Atlantic coast. As we shall see, this central (pivotal) position in Europe made him a centre, or a central node, because he could access information from West and East, and transfer it to East and West (and also, but less obviously, from North to South). He used, for instance, Joachim II Camerarius to diffuse and transmit information from South to North.

²⁰⁶ Gessner's network was mostly oriented East-West, and much less North-South. Indeed, Zurich functioned more as a crossroads between Eastern and Western Europe than between Northern cities and Italy, a role apparently devoted to Basle.

²⁰⁷ There are few in-depth studies of sixteenth-century correspondence network, and even fewer of networks of naturalists or physicians. The networks of Erasmus (Robert Mandrou), Philip Melancthon (in Heidelberg, under the direction of Heinz Scheible) and Heinrich Bullinger (in Zurich, under the direction of Rainer Henrich) for instance, have been, or still are in the process of being reconstituted. All three present a similar concentration of the correspondents, with a wide-ranging periphery. The maps of Bullinger's network are available online (<http://www.irg.uzh.ch/hbbw/karten.html>).

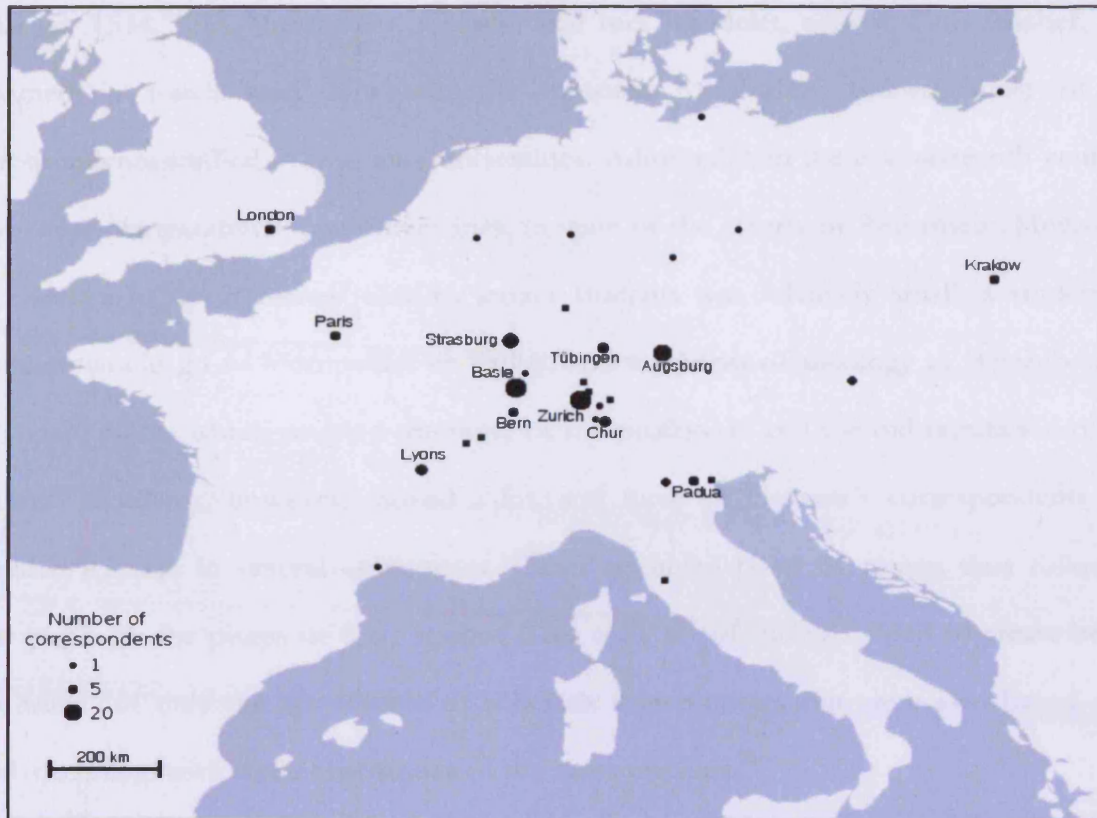


Figure 6: Gessner's correspondents in Europe

In order to find correspondents conveniently located, Gessner largely drew on the stock of his personal acquaintances. As letters were perceived as a private conversation with friends, it seems normal that he should have relied on people with whom he had already adopted the habits of friendship. Like many of his contemporaries, he benefited from the general mobility characteristic of the early modern period.²⁰⁸ He very likely met a number of his correspondents during his student years in Strasbourg, Bourges, Paris or Montpellier. A letter from Théodore de Bèze underlined, for instance, in 1549, the long-lasting friendship uniting him and Gessner, since their meeting in Bourges, in Volmar's

²⁰⁸ On this point, see for instance Willhelm Frijhoff, « La circulation des hommes de savoir: poles, institutions, flux, volumes » in *Commercium litterarium : la communication dans la république des lettres, 1600-1750*, Hans Bots and Françoise Waquet (eds), Amsterdam : APA-Holland University Press, 1994, 229-258.

house, in 1534.²⁰⁹ In Montpellier, Gessner had met Rondelet, who was his teacher, and remained in touch with him after he returned to Zurich. Indeed, most of his correspondents studied in the same universities. Admittedly, in the mid-sixteenth century, there were comparatively few universities, in spite of the efforts of Reformers. Moreover, the number of 'great names' able to attract students was relatively small: a student of medicine would go to Montpellier or Padua, and a student of theology to Wittenberg or Tübingen, places which coupled the fame of the professors and the old reputation of the faculty.²¹⁰ Students, however, moved a lot, and most of Gessner's correspondents had attended lectures in several universities. Other occupied posts of tutors, thus following their pupils to the places of their studies. This early set of travels helped to create bonds that were not only the foundation of scholarly comradeship, but were also based on a similar training, with similar memories of the same teachers.²¹¹

²⁰⁹ Letter from Théodore de Bèze to Gessner, dated 22 [August] 1549, given in *Correspondance de Théodore de Bèze recueillie par Hippolyte Aubert*, Geneva, E. Droz, 1960, (Travaux d'Humanisme et Renaissance, 40) pp.49-53.

²¹⁰ The weight of fame in a student's choice of university can be seen from the way Gessner criticised the faculty of medicine in Montpellier, where, he said, he learned little, in a letter to Johannes Crato, 06.10.1560. *Ep. Med.*, ff. 6v-7r.

²¹¹ The system of the letters of recommendation reinforced this trend, as a student was often sent to his local protector's old masters. Caspar Wolf, for instance, studied in Montpellier under Rondelet.

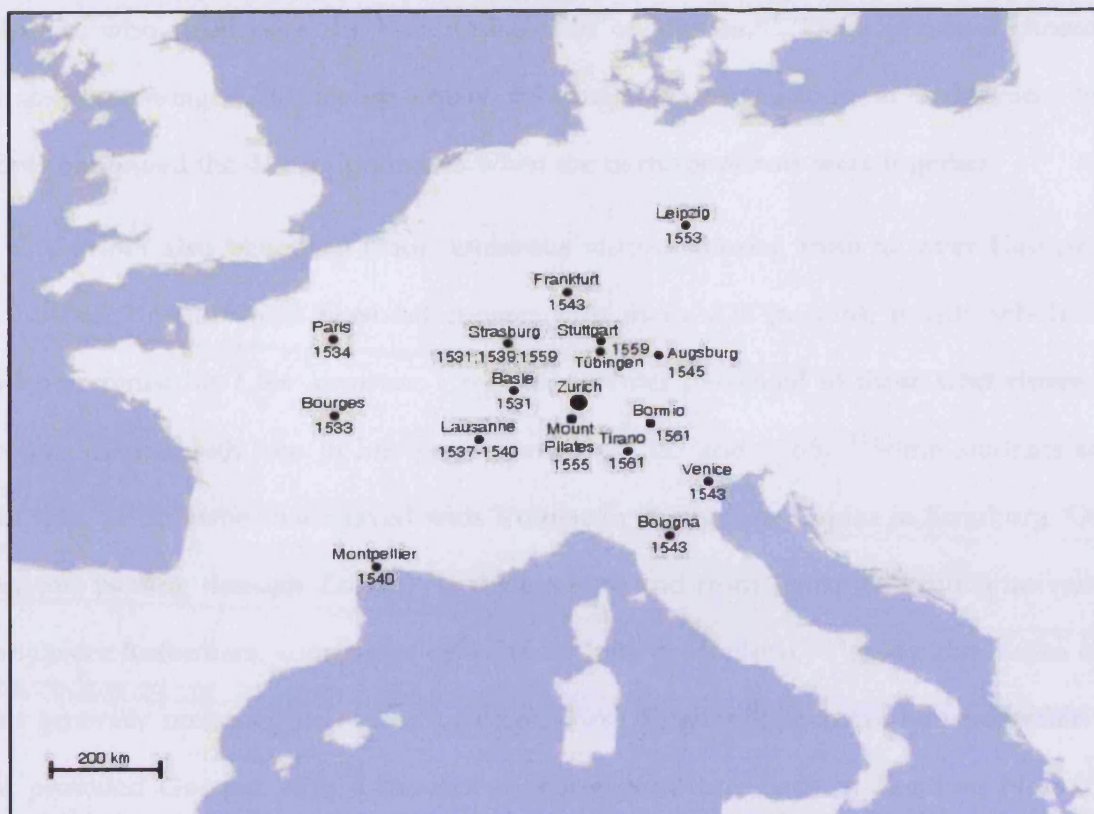


Figure 7: Places visited by Gessner during his lifetime

After these training years, however, new acquaintances and potential correspondents could still be made. Staying in a city for a certain length of time might also be fruitful: Gessner met Jean Ribitt between 1537 and 1540, during his “exile” to Lausanne, after his marriage. Ribitt afterwards succeeded him in the Chair of Greek, and they corresponded at least until 1550.²¹² In subsequent trips to Basle or Augsburg, Gessner met local physicians and scholars,²¹³ while climbing Monte Baldo reinforced his contacts with Francesco

²¹² Only two letters survived, copied in a ‘main courante’ Ribitt kept of his letters. BNF MsLat8641, ff. 9-10v; 37v-38r; dated 1st October 1547 and 15 April 1550.

²¹³ See for instance Gessner mentioning a visit to someone possessing a botanical garden in Basle. Although no correspondence seems to have been continued, and although he used Zwinger as a go-between, Gessner nonetheless resorted to personal acquaintance in order to establish the location of the plants he wanted and his rights to get them. See Gessner to Zwinger, undated, *Ep. Med.*, ff. 105v-106r “Est apud vos Bominus nomine medicus Flander, is inter Grataroli et Caelii domum habitat : cujus filius etiam medicinae operam dat,

Calzolari, who ruled over the botanical garden of Verona.²¹⁴ These personal encounters certainly encouraged further epistolary exchange. A conversation at a distance, letters simply continued the discussion begun when the correspondents were together.

Gessner also benefited from numerous visitors coming from all over Europe, and established, or reinforced personal contact with them. 228 persons, mostly scholars and students, signed his *Liber amicorum*, a register Gessner presented to those who visited him, but also carried with him in his travels between 1555 and 1565.²¹⁵ Some students stayed with him, as he earlier had stayed with Volmar in Bourges or Capito in Strasburg. Others were just passing through Zurich, on their way to and from Italian or French universities. Many were Reformers, sometimes exiles from Italy or England.²¹⁶ Unlike the Italian exiles, who generally remained in Helvetian cities, these English Reformers returned after 1558 and provided Gessner with a number of correspondents. Back in London, Norwich or Cambridge, John Dee, John Parkhurst, Thomas Gybson, and William Turner contributed valuable zoological information.²¹⁷ The shape of Gessner's correspondence was thus engraved in his personal life both chronologically and socially.

It was not always necessary, however, to meet face-to-face to create an epistolary relationship. For peripheral correspondents, letters could function as a substitute for a direct meeting, although sometimes a very formal and strained one. When no previous direct contact existed, the epistolary relationship involved greater care than the average

ab eo petas meo nomine semina Camomillae nobilis, et alterius herbae similis, quam in horto suo superiori aestate mihi demonstravit. Pro iis alia quaedam non vulgaria ad eum libenter mittam, si petierit."

²¹⁴ See Charles Salzmann, "Francesco Calzolari und seine Pflanzensendungen an Conrad Gessner in Zürich", *Gesnerus* 16 (1959), p 81-103.

²¹⁵ The *Liber amicorum* was thus a contact list more than a guest book. Alfredo Serrai, *Conrad Gessner*, Rome, Buzoni Editore, 1990, pp. 360-369, and Richard Durling, "Conrad Gessner's *Liber amicorum* 1555-1565", *Gesnerus*, 22 (1965), 135-159 both give transcripts with biographical details for the signers.

²¹⁶ On the religious exiles in Zurich and more generally in Reformed Switzerland, see W. Frijhoff, "La circulation des homes de savoir », 1994.

²¹⁷ William Turner, especially participated actively in promoting Gessner's natural history.

letter to friends. For instance, when Johannes Nicolaus Boner, a nobleman in Poland, sent him the horn of a Scythe animal, Gessner carefully drafted his answer. He first threw in a great name – Erasmus – as a common acquaintance, and added at the end of his draft, three others, known to both the correspondents, with a full statement of their relationship to him. He asked him to greet for him successively Francesco Lismanino, whom he had “experienced as a man of incomparable piety and erudition”, Joachim Rheticus, “who always was very close to me and beloved by me” and Anton Schneeberger, “a young man quite erudite and very honest, whom I have loved very much since he was a child”, if and when they were around.²¹⁸ All three men had lived, either since infancy or for a substantial period, in Zurich, and had been established near Cracow for some time when the letter was written. Name-dropping was thus not merely a matter of self-fashioning, a way of enhancing one’s own character by reminding the correspondent’s of the virtues of one’s friends.²¹⁹ Although it partly relied on the shared ideal of the pious, honest and erudite member of a Republic of Letters, what was at stake was personal acquaintance and personal contact. Shared experience of common friends’ virtues was a bond, as much as a recommendation;²²⁰ it made correspondence possible with places which formed an essential *menagère* of relatively ill-known animals, i.e. a source of rare and novel information.

²¹⁸ ZBZ MsC50a52, (f. 274).

²¹⁹ In the letters exchanged with Sylvius Caesar Scaliger, a similar instance of name dropping – those of Robert Constantin and Julius Caesar Scaliger – in an even more formal way can be observed. While the elder Scaliger was, I think, no personal acquaintance of Gessner’s, Robert Constantin had studied with Julius Caesar Scaliger in Agen – as the brotherly appellation used by Sylvius Caesar hints at, and his travels through Germany and Basle had certainly put him in contact with Gessner, with whom he exchanged letters and visits.

²²⁰ David S. Lux and Harold J. Cook in “Closed circles or open networks ? Communicating at a distance during the scientific Revolution”, *History of Science*, 36 (1998), 179-211, highlighted a similar importance of personal contact in the establishment of the ‘weak ties’ necessary for the establishment of trust and the spread of ‘matters of fact’ in the case of the Royal Society of the second half of the seventeenth century.

Direct contact or not, Gessner's correspondence was based on a first, individualised contact. This importance of personal contact, meeting face-to-face or common personal acquaintances, helped to create the feeling of local scholarly communities. They did not merely rely on language, training and friendships in common, although all were important. What mattered were the moments shared together: a common past. Nor were they merely disciplinary communities.²²¹ Theologians, mathematicians and physicians were quoted together as possible personal bonds because they belonged to the same circle of local scholars, not out of a shared interest in a common discipline.

Similarly, letters of recommendation grounded scholarly relationships in the personal sphere of each correspondent and in the geographical space of local circles. Scholars at the receiving end of a letter of recommendation were beholden not only to give food and shelter, if they could, to their newfound protégé, but also to introduce him to the interesting people of the town.²²² Such *sodalitates*, as Robert Mandrou has named them,²²³

²²¹ The question of disciplinary communities is important, because it has shaped the general understanding of the emergence of disciplines in the last decades. Because letters were caught in a bigger discourse, that of the Republic of Letters, and in the same time in a very narrow local anchorage, they did not seek to define correspondents disciplinarily, except through the term *studiosi*, learned people, which here, I would argue, referred to the potential components of the Republic of Letters. While Gessner sometimes used the term *studiosi naturae*, or *studiosi medicinae*, or *antiquitatis studiosi* (Gessner to Adolf Occo, 26.12.1564, *Ep. Med.*, ff. 48v-50r), it was not, as far as I know, to designate correspondents, but in the context of the readership or audience of books. The only exception is when he uses *studiosus medicinae* to define a potential amanuensis, in a recruitment process (Gessner to Zwinger, 22.03.1563, *Ep. Med.* f. 111r). Thus it seems to me that the notion of a disciplinary community has much more to do with the definition of readers, or rather of a "Republic of authors" than with that of potential correspondents.

²²² Several names in the *Liber amicorum*, for instance, belonged to visitors of Bullinger, whom he brought to visit other important scholars in Zurich. Failing to fulfil this duty always provoked profuse apologies. See Gessner to Hospinianus, 3 October 1563 (*Ep. Med.*, f. 103v-104r) or when Gessner missed the opportunity of introducing a relative of Gasser to two Polish travellers, who could have made solid local acquaintances as well as potential patrons both for the young man and for Gessner himself (Gessner to Gasser, 27 February 1563, *Ep. Med.*, f. 24r).

²²³ Robert Mandrou, *Des humanistes aux hommes de science, XVI^e et XVII^e siècles, Histoire de la pensée européenne*, 3, Paris, Seuil, 1973.

also structured the correspondence around cities organised around a central ‘institution’ or ‘court’ attracting innumerable scholars – the University for Basle, the Fugger family for Augsburg –.²²⁴ Basle University, for instance, employed at some point in their life fifteen correspondents and acquaintances of Gessner. Seven students linked to Gessner attended their lectures. The flourishing printing trade, nourished by the proximity of the university, provided work for up to eight correspondents or personal relations. In the local circle of Gessner’s Basle correspondents and acquaintances, only five were not directly related to the university or printing trade. Four of them were university-educated (two physicians, one a theologian and one a humanist); the fifth was a niece of Gessner employed as a servant in Coelio Secondo Curione’s house.²²⁵ Finally, at least sixteen of Gessner’s correspondents had visited Basle, like Gessner himself, for religious reasons, studies or other motives.

²²⁴ It would be interesting, although I don’t have the space here, to examine these local contexts locally, i.e. to see if the correspondence is organised differently according to the institutions towards which it is directed (court, university, city of printers...) I would suggest it is not, and that what counts is that there is a space for the diffusion of the letters and the sharing of knowledge, i.e. for the involvement of others, but this would have to be confirmed.

²²⁵ Out of a total of 35 relationships (21 correspondents and 14 personal acquaintances living in Basle (i.e. people who had signed the *Liber amicorum* or are recorded as having met in the correspondence).

close ties.²²⁶ Local anchorage was thus also a question of anchorage both in the personal networks of a city and in its institutions.

Correspondents' professions highlighted the depth of this local anchorage. Of Gessner's 254 correspondents,²²⁷ 86 were physicians, sometimes practising privately, often also assuming responsibilities within their cities (8 town physicians) or in royal, ducal and imperial courts (13 court physicians). These distinctions were sometimes fluid: Adolf Occo, for instance, was not officially town physician, but he oversaw, by 1564, the apothecaries of Augsburg, a heavy responsibility at a period when plague was breaking out repeatedly.²²⁸ Moreover 51 correspondents also occupied a chair in the local "High School" or university, sometimes coupling teaching with medical or pastoral functions. Many relations (44) occupied important functions in various reformed Churches, especially Zwinglian. Some eighteen correspondents added to this religious office administrative responsibilities in their home country, and many jurists were also involved in the affairs of the Court. Johannes Crato, later Crato von Krafftheim, was perfectly representative of this local and institutional anchorage. Born in Breslau in a family of landowners, Crato studied first in his

²²⁶ Among the consequences of this structure of the correspondence around centres, the presence of several correspondents in the same location was the cause of what Gessner defined as a healthy emulation in gift-giving. Having scholars competing to send out new things, because it was part of enhancing their status, was certainly highly rewarding for the correspondent at the other end of the correspondence. One must not, however, overdo this competition: because networks, as we shall see, were relatively specialised, and the relationship with the correspondent completely individualised, but also presumed to be equal and disinterested, the competition was slightly less acute than for patronage relationships, for instance.

²²⁷ It has proved extremely difficult to account globally for the professions of the correspondents, because moving from one 'professional appointment' to another was very fluid and constant. The problem of professional activities is that it is very rare that a correspondent be only listed for one profession. Moreover, just defining a profession in the sixteenth century is problematic, and largely dependent on the scholar's publications. physicians or jurists are usually registered under one profession, but how to distinguish between philologists, philosophers, historians... The criterion of the diploma is obviously not enough, and Gessner himself taught Greek before he turned to medicine. Nonetheless, Appendix III offers an overview of the repartitions of the correspondents

²²⁸ See Gessner's letter of congratulations, 19.06.1564 *Ep. Med.*, f. 51r-52r.

hometown, before he left for Wittenberg, Leipzig and Italy. Graduating from Padua in 1545, he practised in Verona for a while, before coming back to Breslau as a town physician. In 1560, his increasing fame earned him the title of imperial physician, and he was called to Vienna to attend Emperor Ferdinand. When the latter died in 1564, Crato went back to Breslau, but was immediately named first imperial physician to Emperor Maximilian. In 1567, he was knighted, granted land in Ruckfertz, near Glatz, and began to assume both medical and juridical functions first over the Land of Rottweil, then over the Court. This courtly career met with growing success as long as Maximilian lived: after his death in 1576, purges of evangelical elements sent Crato back to Breslau for one year, before Rudolf called him back to resume his previous functions and courtly responsibilities in Vienna. As a correspondent, Crato benefited both from his local anchorage in Silesia and from his institutional contacts with the centres of imperial power in Vienna. A town physician, a landowner, a court physician, one of the administrators of the Empire and a courtier, his institutional power was considerable, and his outreach very wide.²²⁹

To lose a correspondent was thus not merely losing a friend: it was losing a precious contact, deeply anchored in his local context, and therefore almost irreplaceable. Gessner was thus understandably overjoyed when, writing to Achilles Gasser, he announced he had acquired, through the intermediary of Anton Schneeberger, a new patron in Poland, in replacement of the nobleman Nicolaus Boner:

²²⁹ In particular, he was at the origin of Gessner's getting knighted by the Emperor. See *Ep. Med.*, ff. 18v-19r (undated). For details on Crato's life, see Viktor Fossel, *Studien zur Geschichte der Medizin*, Stuttgart, 1909, pp. 24-45. Also see J.F.A. Gillet, *Crato von Krafftheim und seine Freunde, ein Beytrag zur Kirchengeschichte*, Frankfurt am Main, 1860. Crato's correspondence has not been thoroughly explored since Gillet's book in 1860. Like Gessner's his letters are scattered around Europe, and apparently in even greater number. For a brief overview, Gianna Pomata, "Praxis historialis: The Uses of Historia in Early Modern Medicine", in *Historia. Empiricism and Erudition in Early Modern Europe*, Gianna Pomata and Nancy G. Siraisi (eds), Cambridge / London, The MIT Press, 2005, 105-146.

I had just finished writing this, and was waiting for a messenger [...] when I received this other letter from you, with which you sent a letter from my dear Schneeberger, heavy with gold; it contained indeed five double ducats, a present from a Polish nobleman, to whom Schneeberger has recommended me, so that I could have a patron in Poland to send me sometimes rare things mostly touching on the history of animals, because the famous D. Boner, who was doing it before, has died.²³⁰

Interestingly, the mention of the financial support by the Polish patron was soon hidden behind the usefulness of the newly acquired correspondent in sending samples (rare and mostly zoological) to Zurich. Getting access was not only a question of location. It also involved entering and successfully managing the relationships made necessary by the epistolary trade: patronage, gift-giving, and reciprocal exchange.

Correspondence was thus constructed as the most useful means of collaborating in the elaboration of knowledge. It shaped a community based on local anchorage, both geographical and institutional, and on shared experience. These qualities were mandatory to people Gessner mostly used for getting access to the material for knowledge: samples and pictures. Local anchorage meant their access existed, shared experience that, somehow, they could be disciplined into sending the right thing in the right form.

²³⁰ Letter from Gessner to Gasser, 17 March 1560 [1563?], *Ep. Med.*, f. 24r. I was not able to identify the Polish nobleman (except perhaps as Sigsimundus Baron of Herbenstein). The question of getting access to the wilderness of Eastern Europe seemed crucial. Gessner sorely deplored the death of one of Occo's correspondents in Transsylvania, M. Brennius : "Utinam vero viveret adhuc Brennius ille amicus tuus, cuius literae missisti ; potuisset enim quaedam recentiora ad nos dare : et procul dubio ab illo tempore multa alia ei observata fuerunt : et verisimile est in montibus illis Transsylvaniae rara multa haberi ; nec dum potui ego, ut desiderabam, aliquem ea in regione medicum invenire amicum : tu si qua ratione potes, aliquem mihi concilies per amicos saltem tuos". (Letter to Occo, 18.04.1565 *Ep. Med.*, f. 74r). This may seem debatable, as the agglomeration of scholars in each location may have made it easy to compensate for these losses. But, while the idea of replacement was very present in both instances, the importance of the personal relationship and of the common past prevented any surrogate correspondent from totally replacing his predecessor.

Section 2: Material exchange and correspondence: the epistolary trade

Possessing nature: collaboration and gift-giving

Correspondence determined a social space where Gessner could collect material all the more necessary to his enterprise now that direct access to nature, in a world where a whole new discourse of seeing for oneself developed, had become increasingly crucial.²³¹ While this raised epistemological problems, which I shall develop in the next chapters, it also gave rise to many new practices. People set about collecting natural objects in museums, gathering material for herbals and botanical gardens, and asking patrons to finance expeditions in remote countries.²³² Medical courses increasingly insisted on anatomies and dissections. A rhetoric of autopsy developed in prefaces, and accompanied the rise of illustrations, while trade brought to European scholars exotic samples they could examine themselves.

This sixteenth-century craving for “possessing nature” made its way mostly through letters, where it was accommodated under the heading of learned collaboration, together with the sharing of similar fields of research by authors. Letters were packages. They offered a flexible, comfortable repository for objects to be circulated. Many material objects travelled within Gessner’s correspondence, circulating the means of knowing from

²³¹ Many recent studies have emphasised this point: for instance for anatomy, Rafael Mandressi, in *Le regard de l’anatomiste, Dissections et invention du corps en Occident*, Paris, Seuil, 2003; for natural history Brian W. Ogilvie, *The science of describing*, 2006. Chapter One of Harold J. Cook, *Matters of exchange: Commerce, Medicine, and Science in the Dutch Golden Age*, New Haven and London, Yale University Press, 2007 offers a recent synthesis of the question.

²³² See for instance the travels of Pierre Belon, Melchior Guilandinus, Carolus Clusius, or Leonhardt Rauchwolff, to quote only some of Gessner’s correspondents.

one correspondent to another, and shaping the practices associated with them as much as botanical gardens, herbals, or collecting practices did.

In the beginning and the end of Gessner's letters, notices of receipt and dispatch of items also kept track of the numerous objects packed together with them or sent through the complementary channel of the printer's mail. According to them, the flow of material objects was remarkable, although its nature varied with every new project of his. Books represented a considerable share of this exchange. They were often circulated with the printers' mail, and touched a wider number of subjects than the rest of the material he exchanged with his colleagues.²³³ Together with them, ancient manuscripts cohabited with recent essays, sent to receive the sanction of the correspondent before an attempt to find a printer. The main part of the material exchange, however, was constituted by material for direct observation. Natural samples, stones and various minerals, pictures and other representations of plants and of animals circulated widely and abundantly. Gessner and his correspondents also exchanged artefacts such as ancient medals, samples of remedies they could experiment with, flasks of urine with which they could diagnose patients. This flow of material objects, however, was linked to the written text of the letter not only by the reception and sending notices, but also by numerous references and complementary descriptions. The heterogeneity of the exchange, text and object, words and pictures, was easy to fit into a letter that could expand practically up to limitations of weight and time imposed by the cost of the courier and the correspondents' busyness.

²³³ Besides medicine and natural history, books on geography, on jewellery, on philosophy etc. circulated, together with numerous manuscripts. Gessner mostly sent his own publications, with a view of having them distributed in the city where his correspondent was living (with strict instructions as to who should get them, and at what condition – generally a reciprocal sending – or for patronage).

Indexing the local: lists and catalogues, an organised collection

Together with these notices, Gessner's letters were full of what could be termed 'shopping lists'. They passed orders to the correspondent as to what he needed and what should be sent. This scientific and social device also ensured that the correspondence would continue.

Gessner generally asked his correspondents either to send him the whole plant – dried or alive – or seeds he could grow in his botanical garden²³⁴ so that he could see the plant by himself. Sometimes, neither was possible: he just got parts of the plants: leaves or flowers, with a view to making identification possible.²³⁵ He thus gave Theodor Zwinger detailed instructions as to the way of sending the plant:

The catalogue of your garden was extremely agreeable to me, and I ask you to send me by this messenger the *Teucrii planta* with its root, so that it can be planted, if you can do without it: so that when it blossoms I may have it painted from life [*ad vivum*]. The same for *Daucus creticus*, *Arca angelica*, *Cantabrica* from the region of Narbonne, *Seseleos Peloponesia*, true *Hyacinthus*, *Tulipa*: one plant of each, arranged in such a way that they may reach me as safely as possible. This messenger is a good and faithful man, a neighbour and compatriot: he will take proper care of everything. The roots will have to be placed in a wooden box with some earth, so that the plant will emerge. Just send me a small branch of *cytisus*, fresh or dried, so that I can compare it with mine.²³⁶

²³⁴ The question of the consequences of the transfer of objects like plants to the botanical garden or the museum will be treated in Chapter 6.

²³⁵ However, correspondents did not always contribute a picture, or a sample of the natural object: sometimes, a description in words was all Gessner could get, and had to struggle with to construct some knowledge of the animal or of the plant. See for instance the letter from Apollinaris Buckhardt in which, among other things, he described an unusual bird. Although Gessner annotated the letter, he apparently did not know what to do with it, and did not use the description, to the best of my knowledge, in the *Historia Animalium*, which explains why it is still attached to the original letter. [ZBZ MsC50a 38].

²³⁶ Gessner to Zwinger, 7 April 1564, *Ep. Med.*, ff. 107r-v.

²³⁷ Here, the need to define the exact manner of sending the plant is indicative of the relatively junior position of Zwinger to Gessner, but also of the many techniques then developing in the conservation and circulation

These procedures (a safe messenger, a specific container, some earth) ensured the cost of transport and of time would not be in vain.²³⁷ It stressed how important the organisation of the collection was. Gessner thus fell into one of his rare black moods (certainly increased by a fit of gout) when his young correspondent Johannes Fabricius Montanus sent him, from Chur, unsatisfactory paintings of plants he already had.

The circulation of catalogues, out of which Gessner could place his orders, obeyed the same logic. They described the plants that the correspondent grew in his own garden, and subsequently might share. All of Gessner's correspondents interested in natural history were requested to send catalogues²³⁸ of their plants, regularly updated in order to make the collecting efficient and to avoid duplicates. Theodor Zwinger, for instance, sent such a list once a year and Felix Platter contributed at least one list of his own plants, and one for the plants he was able to procure from Alsace.²³⁹ A theologian from Basle, Johannes Hospinianus, was asked a little earlier to provide a catalogue of the fishes living in the Rhine. Each list elicited from Gessner commands for paintings or the real object. Sometimes, however, a list was not precise enough. Despite the fact that Zwinger had just sent him a new catalogue of his plants, he asked on 26 November 1565:

If you have some rarer or foreign plants, or some of their parts put aside, I would like you to give at least their names to me, at your first moment of leisure, and in mentioning the particulars

of plants. See for instance, Ogilvie pp.158; 165; 255-56 insists on their role in training the witness as well as in ensuring autopsy; Pinon highlights various techniques in drying fishes, in "Clématite bleue contre poissons séchés : sept lettres inédites d'Ippolito Salviani à Ulisse Aldrovandi", *Mélanges de l'Ecole Française de Rome*, 114 (2002), 477-492 and their consequences for the subsequent representations of animals.

²³⁸ The circulation of all sorts of catalogues was a main concern in Gessner's correspondence. Listing things obviously was related to the feeling of overload of information Gessner and his friends experienced and to their attempt at an exhaustive knowledge of nature, but it was also a very convenient way to know what belonged to whom, and how one could access it. A table of the catalogues exchanged in Gessner's letters can be found in Appendix III.

²³⁹ Gessner to Platter, 16.01.1559 *Ep. Med.*, f. 97v.

make clear whether flower, fruit or root are present, besides the plant stem and its leaves, for one, two, or all of them. The reason is, I am really struggling to represent from life these three things for all the plants. But it is from them, rather than from the leaves, that the nature of plants and their relationships appear. With these important things (from the fruit, the seed and the flower) I could easily determine whether the *staphisagria* and what it commonly called *consilida regalis* are plants of the aconite family.²⁴⁰

What made the good collector, and therefore, the good natural historian, was the ability to determine the crucial object that would make it possible for him to distinguish between two plants, thus shifting the interest of the scholar from the discussion of ideas or of texts to the direct observation of the object or of the event. The exchange relationship was based on the personal relationship between the correspondents, who knew each other well enough to determine what would please the other, as well as what the other possessed.²⁴¹ It constructed knowledge not on the chance discovery of rarities or curiosities *per se*, but on the search for exhaustiveness and on an organised enterprise of collecting, which perpetuated itself through the correspondence.²⁴²

²⁴⁰ Letter to Zwinger 26.11.1565, *Ep. Med.*, f. 113r [The last words are in Greek in the text]. This passage also highlights the quest of early modern scholars for factors clarifying the identity and relationships of plants. Gessner apparently was among the first scholars to insist on flowers and fruits as distinctive elements between species.

²⁴¹ Although I am not dealing with trust here, I would like to suggest that the depth of these personal relationships with scholars Gessner sometimes had known from childhood also ensured that the provenance of the object was marked with trust in its sender.

²⁴² This, however, did not create the same relationship as books sent for patronage, for instance, or simply *honoris causa*. In neither case was gift a spontaneous practice, nor an uncoded one, but unsolicited items which were sent did not seem to meet with much success, if only because they meant duplicates in the collection. This hints at an organised collecting practice, rather than at an exchange of services, at least in the case of natural history. For medicine, as we shall see in the next chapter, it appears quite different, insofar as a large part of the exchange was about news. An early letter to Benedictus Aretius points in the same direction (*Ep. Med.*, ff. 115v-116r). In 1551 Gessner compensated for the fact that he had nothing new to say by commenting at great length on his last reading of Pliny. This letter stands out as exceptional, because it hints at a total absence of 'premeditation' or 'organisation' in the exchange of news. Perhaps this is where the difference between exchanging news and objects stands, actually.

Love, cheese and guinea-pigs

Material exchange, therefore, not only circulated objects, but was also the social cement that held the correspondence together and incessantly generated new letters. Firstly, any gift elicited the obligation of reciprocity, caused a new letter to be written and new objects sent. From Felix Platter, a physician in Basle, Gessner for instance ordered in 1558:²⁴³

Among your marine things, send me, please, *pastinaca*, *polypus*, *spada* and *lacertus*: either as a loan, for some time, or as a gift, with the hope of a reciprocal present, or as a sale. I am now editing separately my *Icones* of Aquatic animals, adding a painstaking and copious list of the names of the various species: once they are printed, if I know you want them, I shall send them to you, as well as anything else you ask for.²⁴⁴

The reciprocity was thus double. It consisted in a fixed part, the *Nomenclator Aquatilium Animantium* and the *Icones Animalium*,²⁴⁵ published together in 1560, and in another, more immediate, but indeterminate reward: money, the return of the objects themselves, or a 'reciprocal present', in the case of a gift. Here, the trilogy of loan, gift, and sale²⁴⁶ highlighted the multiple nuances of material exchange available to naturalists and the

²⁴³ As we shall see, the collecting was organised according to Gessner's last project, i.e. chronologically, as well as according to the state of his collections.

²⁴⁴ Gessner to Platter, 31.10.1558, *Ep. Med.*, f. 97r.

²⁴⁵ Conrad Gessner, *Nomenclator Aquatilium Animantium. Icones Animalium Aquatilium...*, Zurich, Froschauer, 1560.

²⁴⁶ Gessner and his correspondents apparently resorted mostly to gifts and loans, even if money, in the case of negotiations made by a local go-between, was often required. As shown by N. Zemon Davis, in *The Gift in sixteenth-century France*, Madison, University of Wisconsin Press, 2000, gift and sale often cohabited in the sixteenth century, without competing. The choice given to Platter was thus real: sale, loan or gift would not alter the relationship with Gessner fundamentally (although Platter's willingness to sell seems to have provoked some irritation in his contemporaries: see Ogilvie, *The Science of Describing*, pp.78-79) but it would have very immediate bearings on each scholar's collection. The importance of exhaustiveness thus gave rare things an increased value, because if they were given or sold, they were lost to the sender. The fact that there is a choice, at a moment when, very commonly, knowledge could and should not be sold, is evidence of the specific status of the material exchange in the correspondence. Although what is exchange is material for

different expectations of reciprocity they created and determined. Gift exchange was certainly one of the most prominent trades in sixteenth-century and seventeenth-century Europe.²⁴⁷ It regulated patronage relationships, but also more common, or egalitarian, scientific exchange. Despite his claims that he was deprived of the help of substantial patrons, Gessner used, like many of his contemporaries, the channels of patronage to try and interest rich sponsors in his research. He for instance sent a copy of his *Icones aquatilium animalium* to the Senate of Basle; frequently thanked Gasser for recommending him to Ulrich Fugger in Augsburg, praising his generosity.²⁴⁸ These gifts, however, differed from the discourse of reciprocal, free and generous exchange that manifested itself mostly in the material exchange between scholars.²⁴⁹ Writing to Benedictus Aretius, he jokingly underlined the complexities of reciprocity:

knowledge, it is also part of the social status of the scholars, and of their earthly possessions (for instance, the fact that Caspar Wolf sold Gessner's collections of paintings was perceived as treachery by Gessner's contemporaries, because they were part of a project of knowledge, and because he had promised he would publish them).

²⁴⁷ Countless studies have explored the dynamics of reciprocal gift. Patronage relationships required that gifts be donated to aristocrats, rich merchants, or highly placed ecclesiastics to ensure their patronage and therefore the financial soundness of the scientific enterprise. But gifts were also 'an integral part of the study of nature'. Gifts also enhanced the social status of the correspondents by displaying the enviable state of their respective collections while guaranteeing their steady growth. Permeating the culture of the early modern period, gift-giving was part of the discourses of science and scholarship that constituted the ethos of the scholar, but also built up his collections and his knowledge. Cf for instance Paula Findlen, "The Economy of Scientific exchange in early modern Italy", in Bruce T. Moran (ed), *Patronage and institutions. Science, Technology and Medicine at the European Court 1500-1700*, Rochester / New York, Boydell Press, 1991, pp. 5- 24.

²⁴⁸ Failing these obligations of entering into a patronage relationship in return for the gift of a copy of Gessner's books, for instance, called for juridical questioning and intervention. See letter to Abraham Musculus, 21.02.1550 UBB, MsGI68, 88.

²⁴⁹ Anne Goldgar in *Impolite learning*, 1995, described these discourses as based on the exchange of services. This would offer a broader framework to the problem of the gift exchange, thus inserted into the exchange of services, among which would feature providing access. However, this does not account for the materiality of the gift: just as Gessner distinguished between making a present and the object given itself, it seems to me that gift exchange cannot be completely swallowed up into exchange of services.

Many thanks for your cheese: my guinea pigs were not worth that much, and it is enough for me to know you love me *and it was more glorious to win through one's actions, but now I have been utterly bitten by your ambition; I yield to you, and I accept your superiority over my gifts. I confess I have been beaten, and I am equally annoyed with myself, and I complain under my breath that you did not allow me to enjoy first place.* I don't want to look ambitious to you, nor enter into a competition of presents with you, so I am not sending anything in return, except a pamphlet of six pages, containing *a few words of advice on health.* You shall soon expect our pamphlets, already promised to you once or twice, *on lunar plants and the ascent of the Mount Pilatus.*²⁵⁰

These declarations of gratitude lavished on Aretius and his cheese²⁵¹ reinforced the hypertrophied protestations of friendly emulation. However, underneath the jocular intention of the balance established between cheese and guinea pigs, the preoccupations related to the exchange of gifts appear openly. The first one was the risk of a social race to gift-giving close to competition. Apparently, in this field as well as in many other scholarly domains, moderation was the rule. The use of *ambitiosus*, very strong, is here symptomatic: why should Gessner, usually quite keen at picking the collections and botanical gardens of his correspondents, suddenly turn shy? This overdone shyness was very short-lived: he immediately promised a pamphlet and a new book of his. Besides the humorous protestations of love towards his old friend, the balance of cheese and guinea-pigs highlights the immense variety of the exchange, but also the way natural objects or artefacts were constantly assessed in terms of monetary and of scientific value.

²⁵⁰ Gessner to Aretius, 29 January 1552, *Ep. Med.*, f. 116r. The date of the letter is here problematic, as the pamphlet only appeared in 1555, *De raris et admirandis herbis: Descriptio Montis Fracti, sive Montis Pilati*, Zurich, Andreas and Jakob Gessner, 1555.

²⁵¹ The story of the cheese is interesting for various reasons: Gessner thanked Aretius again on 27 May 1562 (*Ep. Med.*, f. 117v) for a delightful cheese. The editors perhaps changed the date, although the exchange of cheese may have been a habit between the Swiss cities.

The value of the gift: rarity and novelty

Defining the worth of a gift, however, might prove tricky, especially as the language of friendship and praise was as important as the worth really attached to the thing. This language was used between all correspondents, including younger ones like Adolf Occo:

My neighbour Funck came late to us, and brought three of your long desired letters, together with your many different presents in money, paper and plants: which you have wanted to bestow upon me as a token of your singular goodness and very generous love for me. There was no need for money: ours is such a minuscule little dedication that I should rather have been ashamed to expect some *gift or counter-gift* from you. Meanwhile, however, I appreciate your generosity, and the things themselves, your presents, all very agreeable and very rare.²⁵²

Although it was a topos, the importance of generosity in sixteenth-century scholarly culture is here reinforced by the strength of the praise. Gessner seemed to distinguish between the things he received, and on which he would, a few lines later, comment abundantly, and the present, as if the gift and the thing given were somehow two different things, an intention and a fact, a social manifestation and a tangible support for knowledge. As much as the pleasure of being loved, however, the possibility of beholding something rare was exhilarating. Occo's letter had contained some silver medals, two manuscripts (one of Thomas Aquinas, the other of Johannes De Rupescissa) which differed significantly from recently printed versions, and several books in editions unseen or unknown by Gessner. Here, the exceptional character of the manuscripts and books increased their worth and made the exchange fruitful, and as Gessner later said, only returnable by true love and respect.

²⁵² *Ep. Med.*, f. 76v.

The exchanges with his correspondents seem to have been governed by this notion of rarity.²⁵³ Recent scholarship has insisted on the importance of wonders, and of monsters, in the cultural setting of the sixteenth century.²⁵⁴ Gessner's notion of rarity does not, however, entirely fit in this scheme. Whereas, for instance, he appreciated the exceptional character of the bifid nail of a beaver Georgius Fabricius sent to him in 1554,²⁵⁵ the dorsal fin of a Baltic fish was more interesting on account of its remote origin and its difficult access than its marvellous or exceptional character. Actually, rarity was defined as much by location as by exceptionality. Plants from the New World, for instance, were largely distributed as potential counter-gifts to encourage reluctant correspondents or compensate for extravagant presents.²⁵⁶ To Zwinger, for instance, he wrote:

I hope I will soon get the seeds of a plant brought from the New World, which leaf, when very small quantities of it are just masticated (it should not be swallowed), or when its smoke is breathed, provokes immediate inebriation; as I have experienced more than once. I have a picture, the flower is elegant, [it was born to a friend in Berne], similar to that of *Convolvulum* or *Campanula*, purple coloured. This, and perhaps other small rare objects you will receive, if you help me and make haste to send me your catalogue of rare plants, etc.²⁵⁷

²⁵³ See also, for instance, the way Gessner systematically tried to entice his correspondent to send him his rare plants by insisting on his ability to match them by his own rare plants. "Commenda me D. Ioann. Steckin, ut hac in re mihi gratificetur: et si quae alia semina rara habet: quamvis vel nomina rariorum cognoscere mihi sat fuerit, ut postea petam paucissima forte aliqua quibus careo. Sic erit occasio amplior, ut etiam in nostro opere nomen ejus legatur: et rara quaedam vicissim a me accipiet." Gessner to Occo, 05.10.1564, *Ep. Med.*, f. 53r.

²⁵⁴ See Lorraine Daston and Katharine Park, *Wonders and the order of nature 1150-1750*, New York, Book Zone, London, MIT Press, 1998; Jean Céard, *La nature et les prodiges: l'insolite au 16e siècle en France*, Geneva, Droz, 1977.

²⁵⁵ Gessner to Georgius Fabricius, 22.06.1564, *Ep. Med.*, f. 131r-132r.

²⁵⁶ The link between rarity, worth and location of plants or animals did not only exist for the New World. Moreover, even on the continent, many spaces remained relatively unknown to naturalists, thus making their fauna and flora eminently rare and valuable. Hence the importance, for Gessner, of having friends in the peripheries of Europe, and his sorrow when a merchant from Augsburg died in Egypt, or when a Polish correspondent of Occo's met the same untimely death.

²⁵⁷ Gessner to Zwinger, 26.11.1565, *Ep. Med.*, f. 113v.

Rarity combined with remote location to confer on plants of the New World the supplementary attraction of novelty.²⁵⁸ But the letter also underlines how dependent the exchange of material was on circumstances. Gessner had been waiting for the plant for a considerable amount of time. He had received a unique leaf one year before, and tried it on himself, with the general result he described in his letter to Zwinger.²⁵⁹ Since then, he apparently had been waiting for new arrivals from the New World, via France and Augsburg.²⁶⁰

Specialising relationships

Gift and material exchange were thus not ruled only by the necessities of sociability.²⁶¹ They depended on many circumstances: on the value of the previous gift, admittedly, but also on the needs of the addressee, and what was available to the sender at the precise time when he was writing the letter, in terms of objects and in terms of messengers.²⁶² Gessner's needs were generally, as I have mentioned in Chapter 2,

²⁵⁸ One of the main consequences of this assessment of gifts is that it gave objects a supplementary dimension, classifying them as rare or not, etc. And the inducement of getting something rare, without any more precise indication concerning its nature, was enough to convince the correspondent to send his own update list of rarities. This understanding of rarity, as we shall see, contributed to promote the circulation not only of located objects, but also of news of recent events. To be the first to report interesting events (be they *mirabilia* or not) was thus a large part of the epistolary exchange. As we shall see in Chapter 4 and 5, this promoted the understanding of knowledge as a way to accommodate novelty.

²⁵⁹ More, and funnier details on the effects of Gessner's self-experimentation can be found in a letter to Funck, 05.11.1564, *Ep. Med.*, 96r-97r. It is however possible that one or several of the letters were written earlier, and the date changed.

²⁶⁰ The arrival in Zurich of plants from the New World in November, 1564 and 1565, seems either mere coincidence, or a mark of the dependence of material exchange on the hazards of correspondence and especially the seasons of navigation.

²⁶¹ And this is why Gessner sometimes happened not to have anything to send except news...

²⁶² Gessner often postponed sending objects for lack of a trustworthy messenger. Reciprocally, finding one good messenger often caused him to hurry (and hassle) his correspondent. Similarly, the objects sent depended on what was at hand, sometimes very concretely: he would send something that had suddenly emerged from the disorder of his papers, or postpone the sending of something he could not find any more.

determined by his agenda of publications. His solicitations to correspondents were mostly oriented towards getting access to whatever he was writing on. The preparation of the *De omni rerum fossilium genere* led him in 1565 to exchange, briefly, stones. More importantly for us, as our sources make evident, from the moment he finished the *Historia Animalium*, he began to collect the material for his *Historia Stirpium*. The number of species exchanged in the correspondence increased phenomenally from that moment.

Gessner reciprocated these attentions, by doing his utmost to fulfil the requests of his correspondents. Adolf Occo, for instance, asked him for ancient medals, and he went to great lengths to procure them.²⁶³ This attention to the correspondent's needs functioned among people who knew each other, and followed the rules of letter writing, which commanded a letter should be adapted to its addressee. But the correspondents also had to accommodate external circumstances. Seasonal fairs, for instance, and especially the Frankfurt fairs, prompted an increased exchange both of letters and of books, and seeds of plants were more likely to circulate in the spring. Moreover, while the interests of the addressee had to be taken into account, they were, very often, subsidiary to those of the sender, especially when he was older and more established than his addressee.

Gessner's exchanges with Occo are a most striking example of this 'hierarchy'. Their diversity, over a short period of three years, was extreme, and certainly revealed the latter's location in Augsburg, a place where traders and merchants came from all over Europe. Within the parcel containing the letters were enclosed, and often thrown together, natural objects (roots and seeds of plants, samples of amber, of sulphur, leaves, oyster shells),

²⁶³ This story can be found in Candice Delisle, « Une correspondance scientifique à la Renaissance : les Lettres médicales de Conrad Gessner » *Réseaux de correspondance à l'âge classique (XVI^e-XVIII^e siècle)*, Jean-Yves Beaurepaire, Jens Häselser and Antony McKenna (eds), Saint Etienne, Université de Saint-Etienne, 2006 (33-44). Occo would later publish a book on medals, *Imperatorum Romanorum numismata*, Antwerp, Plantin, 1579, a clear hint that collecting practices and publications went hand in hand for these scholars, long before any idea of display.

artefacts (silver and bronze coins, phials of remedies...) and their representations (paintings, wax engravings, prints, hieroglyphs, watercolours...), and over twenty printed books²⁶⁴ on diverse subjects, from the composition of epistles to the problems of women's jewellery and to plague. Printed in Italy, in France, in various places of the Roman Empire, these books were accompanied by numerous manuscripts. Some were recipes for original remedies that the correspondent was expected to try, others were drafts sent for proofreading, transcripts of an erudite lecture given by a colleague, versified eulogies or samples of a manuscript book. Several listed available books, or proposed inventories of plants with their identification. Finally, a number of the objects included in the letters were themselves letters, either to be forwarded to someone else, or to share with the correspondent.

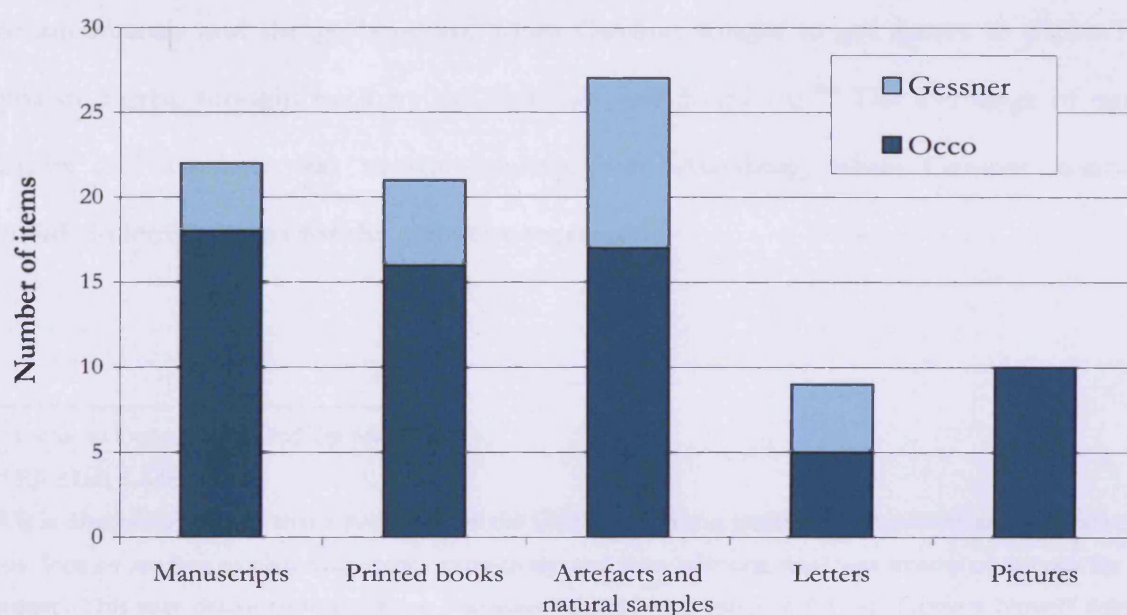


Figure 9: Material exchanges between Occo and Gessner

²⁶⁴ Most books were not, literally speaking, enclosed in the letter, as they often travelled with a printer's mail. They belonged, however, to the epistolary exchange insofar as they were mentioned in the notices of sending and reception.

The flow of objects was not, however, equally balanced. Occo was the sender of all the pictures. Similarly, the books leaving Augsburg for Zurich were extremely diverse in their authors, forms and place of edition. Gessner sent mostly his own books, often in several copies, for transmission to other Augsburg friends, such as the physician Achilles Gasser. Moreover, he frequently asked his younger correspondent to read and select the books he sent. He thus wrote:

Please in future do not send any pamphlet, without having first found some with rare or 'excellent' information (and I found such ones in the pamphlets you sent to me before) and informed me of their titles; I shall thus let you know if I want them, because I have very little time for reading, among all my occupations.²⁶⁵

Similarly, on 8 July 1565, he acknowledged having received from Occo a sample of four pages from a German quarto manuscript.²⁶⁶ The latter assumed a similar role, between the amanuensis and the go-between, when Gessner sought to get access to plants from Syria or Egypt, brought back by the merchants of Augsburg.²⁶⁷ The exchange of natural objects and artefacts was mostly coming from Augsburg, while Gessner essentially provided identifications for the plants he received.²⁶⁸

²⁶⁵ Letter to Occo, 28.09.1565 *Ep. Med.*, f. 78v.

²⁶⁶ *Ep. Med.*, f. 64r.

²⁶⁷ It is interesting to note that a large part of the training of young, promising physicians and naturalists was thus done by reading or observing things extensively, and then selecting what was worthy of interest for their 'master'. This may derive from the same humanist habit of excerpting as the one Gessner himself followed when he cut and pasted information in order to produce knowledge (See Chapter 6). The fact that Gessner could do it repeatedly with a number of young people, just because he was a man of fame and standing, and without this authority being contested, certainly signifies that it was more a question of general attitude to learning and training as based on selecting information than one of personal relationship.

²⁶⁸ This placed Gessner in a position of expertise other scholars abundantly took in their own correspondence network: see for instance Clusius, according to Florike Egmond, *Carolus Clusius. Towards a cultural history of a Renaissance naturalist*, 2007. Gessner's expertise in botanical matters was perhaps based more, however, on his network of younger correspondents than on his publication in botanical fields.

A similar 'specialisation' occurred with other correspondents. From Theodor Zwinger, in Basle, Gessner mostly received books, benefiting from his correspondent's strong family connection with printers, and seeds from his botanical garden. In return he sent seeds at least twice, although in smaller quantities. Young correspondents located in the periphery met with the same treatment, and Gessner remained at the receiving end of the exchange, despite all his protests of reciprocity. Johannes Fabricius Montanus did not benefit from the same large trading and bookselling community as Occo or Zwinger, but he enjoyed a mountainous location, and contributed mostly local alpine plants to Gessner's collection, as well as experiments on Graubunden thermal springs. Gessner, in exchange, sent him remedies. There were thus, for Gessner, two sorts of correspondents: those who sent local species –from Poland for instance, or the Graubunden – and those who sent species they themselves had collected: the power of place was not only one of location; it was also one of outreach.

Often, it was actually location that suddenly extended the outreach of a scholar. For a student from Zurich, being sent to a large university town, such as Basle or Montpellier, with all due recommendations, caused a dramatic increase in this outreach.²⁶⁹ On 27 October 1556,²⁷⁰ Gessner wrote to Caspar Wolf, at that time a student of medicine in Montpellier. A preceding recent letter had not included his letters to local friends and authorities, Guillaume Rondelet,²⁷¹ then Chancellor of the University, and François Fontanon, who taught at the faculty of medicine. While the discussion with the former seems to have been a matter of direct contact between both men, the relationships with the latter appeared more delicate. Indeed, Gessner asked his young friend to entreat the French physician to send new seeds, plants, books and pictures, stating that money would not be a

²⁶⁹ This is certainly why the *peregrinatio academica* rarely consisted in one single destination.

²⁷⁰ The year is unknown, but corresponds to the year before Wolf's scheduled departure in Easter 1557.

²⁷¹ Wolf had been matriculated under Rondelet's direct supervision on 21.06.1555.

problem. Gessner obviously wanted Wolf to importune Fontanon: he twice repeated these entreaties in his following letter, in Easter 1557:

I write now for the second time to D. François Fontanon: please continue to recommend me to him; so that he may quickly provide what he promised me in his letters, that is, perhaps before you return from there. They have to be sent to Lyons, to my friend Andreas Gryphius, who will take diligent care of everything. I have asked D. Fontanon for seeds of *ruta capraria*, but perhaps, now I think of it, you have already sent it, under the name of *polemonia*. I have also asked for seeds of some *casia*, as it is called here commonly. [...] If D. Fontanon has spent money on painters for me, please reimburse him, and I will not be long in repaying you. So tell him that he will get reimbursed for any necessary expenses by you: i.e. for painting the rarer plants, which are not in ordinary books; and it is not very important, if inadvertently some common ones have been painted.²⁷²

Gessner's insistence here is characteristic of the strategies of persuasion made possible by the structure of his correspondence. Here, obtaining the plants meant maintaining pleasant, loving and erudite discussion with the local scholar, while Caspar Wolf, the Zurich insider, could do the dirtier work of importuning his professor, insisting on making haste, and dealing with the unjustified expenses of money (although Gessner gave him, apparently, some leeway on that question...).²⁷³ As Gessner briefly summarised it after yet another demand that Adolf Occo should ask gardener Ulrich Herwart to send him plants: "importunitas saepe profuit" (To be importunate is often effective).²⁷⁴

But young informants presented, besides their harassing abilities, another advantage. They were not involved in the race for publication, and their curiosity was not threatening when they were negotiating with 'Great names' of the Republic of Letters, such as

²⁷² Gessner to Wolf, Two days after Easter, 1557, in *Ep. Med.*, f. 122v.

²⁷³ The notion of rarity, here, is defined as 'absent from the usual books'. This is related to the problem of locality. A rare plant in Zurich might be quite common in Montpellier, and books provided scholars with a measuring stick that would work in every local context. The stress was thus put, interestingly, on what was not in books, thus relegating established, bookish knowledge to second rank.

²⁷⁴ Gessner to Occo, 28.09.1565, *Ep. Med.*, f. 79r.

Pietrandrea Mattioli, Ulisse Aldrovandi, or Caspar Peucer. By contrast, from the moment Gessner's project to write a *History of plants* became common knowledge in the Republic of Letters, many celebrities dropped more or less out of his correspondence. While this could partly be explained in the case of the two Italian scholars by nationalist rivalries,²⁷⁵ the rupture with Leonhardt Fuchs, or the unwillingness to contact directly Caspar Peucer had certainly more to do with the competition for the different publishing fields of natural history.²⁷⁶ The reliance on a menagerie of promising young scholars (such as Camerarius, Bauhin, Zwinger, or Platter) was a good way to gain access to the collections of his competitors. Gessner thus asked Joachim Camerarius to write to Aldrovandi to ask for several plants:

But I would like to ask for them as if they were for you and in your name, and then to send them to me. Indeed, I will perhaps ask for other plants another time directly from him. I have sent him last year many pictures, and other plants, but since then I have not been able to extort anything from him. He keeps promising, and always sends me empty letters. Several years ago he sent me a great number of dried plants, but most of them were common, and I miss the rare ones.²⁷⁷

²⁷⁵ And these rivalries were strong enough; see for instance, in a letter to Camerarius, 27 January 1565, published in Gernoth Rath, « Die Briefe Konrad Gessners aus der Trewschen Sammlung », *Gesnerus*, 7 (1950), p.159 (“Novi et experior quotidie Italorum ingenia, ambitiosa nimium et avara”).

²⁷⁶ This seems to me to deserve a more thorough study, but how can we examine relationships that silently disappear? See for instance how Mattioli complained that Gessner dared to write about botany, in a letter to Aldrovandi: Claudio Raimondi, «Lettere di P. A. Mattioli ad Ulisse Aldrovandi», *Bullettino Senese di Storia Patria* 13, 1-2, (1906) 121-185, quoted by Findlen, “The formation of a scientific community, Natural history in sixteenth-century Italy”, in *Natural particulars. Nature and the disciplines*, Grafton and Siraisi (eds) 1999. See also Gessner's letter to Fuchs, based on the same sense of competition. It is also interesting that Jean Bauhin the Younger tried to hide from Gessner the fact that he was working on a history of plants. See Gessner to Jean Bauhin, 11 October 1565, *Epistolae*, 1591, pp.157-158.

²⁷⁷ Letter from Gessner to Camerarius, 31 August 1564; published in Gernoth Rath, « Die Briefe Konrad Gessners aus der Trewschen Sammlung », *Gesnerus*, 7 (1950), p 155.

While the relations with the Italian scholar had apparently not reached a breaking point, such competitiveness caused Gessner to appreciate more completely his younger correspondents.

Besides the sense of patriotic or religious competition, these fallings out reflected how early modern communities functioned on a double level, or a double scale. There was, on the one hand, a “republic of authors” or of “physicians”, those who competed for rights and truth in the published fields of botany, zoology and medicine. On the other hand, the correspondences of these scholars sometimes had promising young men in common, but their heads rarely interacted outside of the printed word. Young and ‘innocent’ go-betweens thus played a major role in blurring the boundaries between networks and in representing, for more established authors, a constant bridge to their competitors’ networks and possessions.

Despite the apparent imbalance between the young men’s input and Gessner’s, the continuance of the epistolary conversation indicates that each correspondent found reasons for satisfaction in the relationship. Gessner helped several of them to find a printer²⁷⁸ and eased the contact with other celebrities, facilitating, for instance, the correspondence between Theodor Zwinger and Johannes Crato. In exchange, he benefited from their own collections, using them rather as secretaries than as equals, in a master-disciple relationship.²⁷⁹

²⁷⁸ See for instance a letter to Johannes Hospinianus, 13.10.1562, (*Ep. Med.*, ff.102v-103r), where Gessner accounts for his efforts in getting an *Analytica* of D. Scheccius printed. This suggests that material exchange was part of a broader exchange of services, comparable to the one brought to light by Anne Goldgar, although it cannot be totally confused with it.

²⁷⁹ However, I do not think Gessner’s role can be reduced to that of a broker, as Biagioli and Findlen define it (See Paula Findlen, “The Economy of Scientific exchange in early modern Italy”, in *Patronage and institutions. Science, Technology and Medicine at the European Court 1500-1700*, Bruce T. MORAN (ed), Rochester / New York, Boydell Press, 1991, pp. 5- 24 and Mario Biagioli, “Galileo’s System of Patronage,” *History of Science*, 28 (1990) pp.1-62. The structure of the network was clearly linked to the rise of Gessner to this high position: in the

A large part of the importance of the correspondent thus lay in his outreach. The treatment of young correspondents, as local relays to established figures of medicine and natural history or to potential patrons, thus strongly contrast with Gessner's relationships and exchanges with other, more mature and long-established contacts. With Achilles Gasser, in Augsburg, for instance, the material exchanges were not as extensive, and consisted mostly of books and of letters to be forwarded to others. With Benedictus Aretius, a theologian in Berne, and one of his oldest contacts, the balance of the exchange of plants was more or less equal.

The epistolary relationship was thus specialised. Different locations, ages and status meant different tasks for the correspondents.²⁸⁰

Specialised networks and collective reading

However, despite the claims to privacy and intimacy made in letters, these 'specialised' relationships have also to be read within the framework of the groups surrounding both correspondents. As I have shown, each and everyone of them was valuable not only for his outreach, but for being strongly anchored in the local institutions and social circles of his own town. The construction of Gessner's correspondence around centres where he could find a conglomerate of scholars and correspondents, was crucial to the way he wrote and used his letters, not only because he used the individual

beginning of our period, correspondents were almost all older, they grew younger and younger with time. See Appendix III. This rejuvenation of the network is also linked to the entrance of sons of family: the sons of physicians who were correspondents of Gessner, for instance, or their "intellectual heirs".

²⁸⁰ This layout of the network not only meant a relationship from individual to individual; it also meant that one had, wherever one was writing, to take into account these dimensions. Collecting objects involved not only a flatly extended correspondence network, but the ability to navigate between different correspondents and different layers of relationships.

correspondent as a relay towards others, correspondents or not,²⁸¹ but also because each letter was in fact not only written to its addressee, but to the local community.

Letters were not, in the sixteenth century, something private or secret.²⁸² Collective reading was not only expected, but often encouraged and directed by Gessner: he thus avoided repeating several times the same story or the same description to different correspondents, saving precious time. He rejoiced when he understood that, bridging the generation gap, the Augsburg physicians Adolf Occo and Achilles Gasser shared his letters.²⁸³ He rejoiced even more when he managed to establish his relative Johannes Funck, a physician in Memmingen, as a permanent intermediary between Zurich and Augsburg, and as a permanent reader of his correspondence with the Augsburg scholars, as well as one who would share the contents of his correspondence with both ends. Besides the time issue, Gessner thus created a specific network, based both on the community of interest (all members were physicians) and on the necessities of mail exchange. Indeed, his letters to correspondents in Augsburg could take two different routes, involving different people. One was the courier to Lindau, whence letters were forwarded to the correspondent. The other went through Memmingen. From 1563 onwards, it seems that Gessner systematically preferred the latter route, which allowed his news and information to reach the greatest number of people with the least effort.²⁸⁴ Similarly, the choice of writing, in Augsburg, to Occo or to Gasser was significant: Occo, as we have seen, was used when Gessner needed access to remote countries, for his relationships with

²⁸¹ The practice of adding greetings in the end of each letter, for other local scholars, as well as an indication of the next time they would receive, in turn, a letter, was omnipresent in Gessner's letters, thus organising the local community around the epistolary exchange.

²⁸² See Chapter 2.

²⁸³ Gessner often referred to it in his letters. See for instance, Gessner to Gasser, 19.04.1565, *Ep. Med.*, f. 40v. "Mira mihi fuerunt, quae de domini Georgii Fuggeri filii cerebro a vobis dissecto scripsisti. [...] Brevius ad te scribo, quod ad dominum Occonem quoque subinde scribere soleam, quem tecum omnia facere communia gaudeo."

²⁸⁴ See Gessner to Gasser, 11.08.1563, *Ep. Med.*, f. 26v.

merchants, ambassadors and printers. Achilles Gasser, however, had a number of correspondents in common with his contemporary, and forwarded his letters, probably reading them on the way,²⁸⁵ to other locations in the Empire.

In these epistolary networks made of mail routes, material exchange took on another dimension. While letters were read on their way, at their destination, and afterwards forwarded to other correspondents, the objects they contained were also examined in a similar manner. In September 1565, Gessner had asked Adolf Occo for a beryl he knew he possessed. A few months later, he wrote to Johannes Funck:

I have also seen with great pleasure, among other things, the beryl gem: and I will send it back with the rest, in a coffer or a small wooden vase, if your mother thinks it can be done safely. When you receive it, you shall also take care that you do not send it back to Occo without a very reliable messenger, once you have examined it. It is quite beautiful and of great value, and I have never seen one more beautiful. It is beautiful under a peaceful sky, but even within walls: as I was looking at it in my Museum, it was reflecting the image of the window glass *like a mirror*. Look and you will notice, besides the white glow, something of a violent blue.²⁸⁶

Gessner continued by comparing the stone with others he had possessed and with what Zurich goldsmiths knew of it. Every object thus carried with it its own history: a list of possessors and intermediaries who had shared feelings of wonder, knowledge of other specimens, and cares about possible losses and finding the right messenger. The question of possessing nature mattered less than the desire of sharing its wonders, and mail routes

²⁸⁵ See Gessner to Gasser, *Ep. Med.*, f. 37r, “Vale et saluta amicos, in primis dominus Hainzelium, virum clarissimum, cui meas ad dominum Cratonem commites, ad quem literas alias Lindavium misi, ut recta ad ipsum Viennam perferrentur”. On collective reading, see Letter to Camerarius, 30.08.1564: “Literis meis ad Cl. V. D. Heroldum adjunxi meas ad D. Placotomum literas, quas ut Dantiscum recte mitti tu quoque cures rogo. Filo ligatae sunt tenui: quod ut rescindas jubeo, et sigillo meo illaeso interiori literarum parte impositam schedam, modico cera affixam, eximas ac legas. Continet enim quaedam experimenta a medico quodam Gallo nuper ad me missa, optimo sane et doctissimo viro.” Published in Gernoth Rath, «Die Briefe Konrad Gessners aus der Trewschen Sammlung», 1950, p 156.

²⁸⁶ Letter to Funck, 5 November 1564, *Ep. Med.*, ff. 96r-v.

determined a series of stops for the objects and the news, from which information could be diffused to each correspondent's personal and epistolary network.

Centres of the network, if they brought together scholars from the same city, student informants and occasional travellers, thus operated at another level than the multitude of mail networks which mail circulation shaped between one city and another. On the one hand, local groups and common discussions of the contents of the recently received letters and news were called for; on the other hand, scholars took charge of forwarding letters to others, but also to people who were initially external to the exchange. These epistolary bonds were reinforced by personal contact, but they also fragmented the network into a multitude of mail networks, linking one city and its local *sodalitates* to another, and carving the flow of news and objects to the shape of people's personal contacts. Thus, when Gasser forwarded letters to Nuremberg, he was only one of many possible intermediaries. Gessner's correspondence with Nuremberg physicians, Joachim Camerarius, Hieronymus Heroldus and surgeon Johannes Muralte was often carried via Frankfurt (and the printers), or by itinerant scholars or traders: Muralte himself, on his way to Nuremberg, and Ernst Voegler, a printer and neighbour from Zurich, on his way to Leipzig, both delivered letters. From Nuremberg, letters were forwarded to Italy (and Aldrovandi), to Leipzig, to Danzig (to Placotomus) and to Johannes Crato in Breslau. Thus, sending a letter to Crato did not absolutely require Gasser's intervention, and could be done through Nuremberg and letters sent to that city without going through Augsburg. There were thus many routes possible for each letter, that shaped the way its contents were diffused and fragmented the 'global world' of the correspondence network.

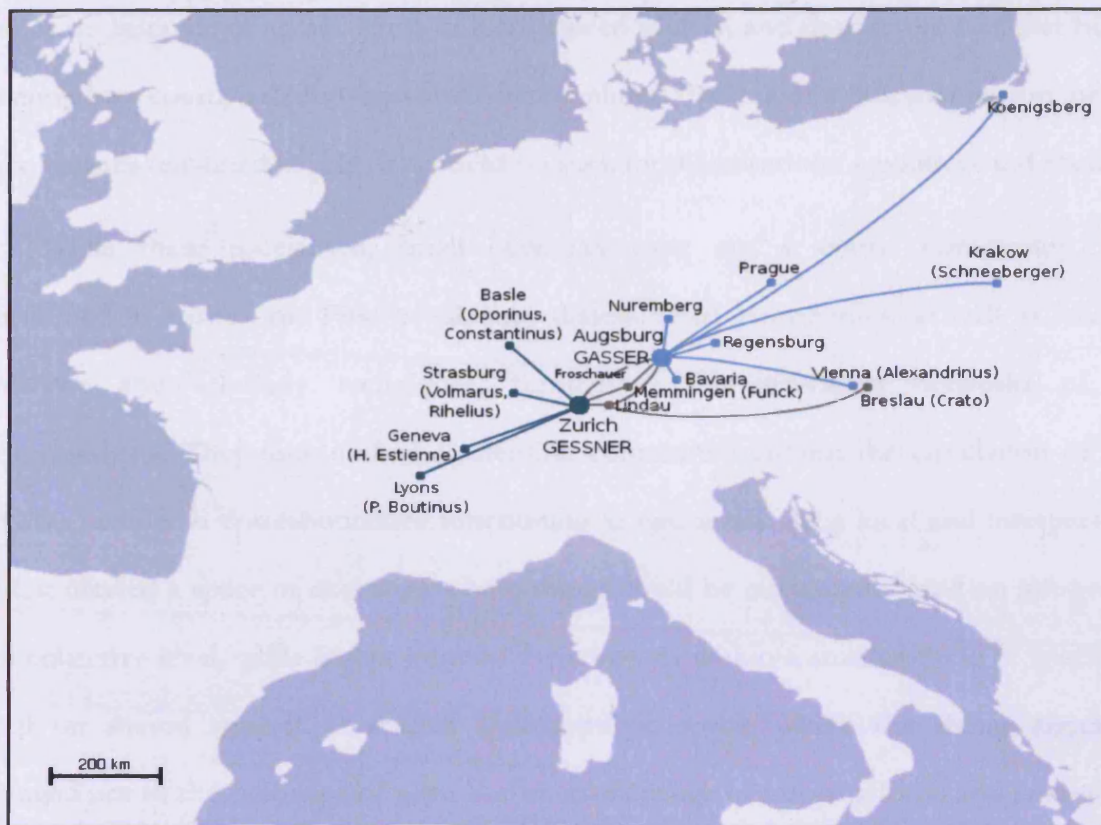


Figure 10: Mail circulation via Gessner and Gasser

This fragmentation of the epistolary space had consequences for epistolary practices. Because they were aware of possible extra-readers, Gessner and his colleagues had to produce worthwhile letters, which would protect or enhance their reputation as scholars among both friends and strangers. Therefore, even in the cases when the debated question remained undecided, letters made any hypothesis into a possible and plausible bit of knowledge.²⁸⁷ Moreover, this fragmentation into several networks granted a large part to the local character of the institution, and to local institutions, with or without walls, that gathered together learned men of a same city, (e.g. printer's shops, where learned men often went to collect books and especially the ones that were sent by their correspondents through the printer's mail; or schools and university, town council where the town physicians gathered to decide over cases of leprosy, etc). Although, in Gessner's network,

²⁸⁷ On this point, see Chapter 5.

there is no instance of an academy, or a structured society, and despite the fact that he did not enter into courtly relationships and often deplored the lack of a financial patron, he and his colleagues remained largely dependent on such local institutions – political and social.

While these specialised, small networks were not a united community, they contributed to shape one. First of all, they disseminated information, as well as rules of behaviour and scholarly techniques, throughout the individual networks of the correspondents. They thus unified a scientific community around the circulation of mail and also justified a correspondence functioning at two levels. At a local and interpersonal level, it created a space of exchange where things could be circulated, based on gift-giving. At a collective level, while letters were on their way, or within a smaller circle of specialists based on shared interest, it shaped a semi-public space, where the things circulated belonged not to the exchange of gifts, but to an exchange of information – and among this information, what belonged to whom was not the least important. This collective level was not, however, global, and it did not draw the boundaries of a Republic of Letters: rather it determined smaller and often intersecting circles, fragmenting the scholarly world in individual and close-tie relationships.

Intersecting circles and networks: circulating news and material from one network to another

A large part of the information circulated in the correspondence network was, once absorbed, instilled in other networks. This is particularly visible in the circulation of objects. Just as, within one local network or mail network, an object could be considered and examined by several members besides the initial addressee; similarly, many objects were subsequently sent round for examination by other networks. Admittedly, some gifts were not made for further circulation, and Gessner rarely circulated the pictures of plants

he had received, although he apparently sent pictures he had painted for further comments.²⁸⁸ Samples of plants, and especially seeds, that were capable of reproduction, once the plant had been established in the botanical garden, were easier to put back in another network, thus feeding the need for news at least cost. So were remedies. Gessner, after relating the cure he had obtained for Rudolf Bullinger, indicated the recipe of the remedy to Theodor Zwinger:

And here is for you the Electuary of Helideus for *hemophthisis*: I have come upon it recently from a certain physician from Augsburg, who affirms in good faith that it is his very electuary he used with so much success, and therefore used to hide from everyone as if it was the most secret thing. [...] I would like you to keep this description for yourself, and not to communicate it to anyone (except to some intimate friend and good physician).²⁸⁹

The recipe he had received from a physician in Augsburg, Philip Wirsung, under the seal of secrecy, was thus divulged to friends and circulated in another, Basle network this time. Here, the ethics of exchange, the need for recognition, and the importance of the local networks combined with this superimposition of correspondence networks to create a space where collections did not really belong to any one person, but were available to all.

²⁸⁸ See Letter to Felix Platter, 17.10.1563, *Ep. Med.*, f. 98v “Mitto specimen iconum nostrarum, ut me seriò agere videas.”

²⁸⁹ Letter to Zwinger, 30.02.1560, *Ep. Med.*, f. 106v.

objects transferred from one network to another were often extracted from their initial context. Just as Philip Wirsung, the physician from Augsburg, lost his name (but not, remarkably, his local origin) in the transfer from one network to another, other correspondents and the very situated and local news they had circulated disappeared from the epistolary ground when their findings circulated further. Thus, when Gessner thanked Adolf Occo and Georg Sighart for sending a picture of the blossom of a hellebore, he mentioned a plant collected on Lake Como, but the Italian donor, a physician, equally lost his name. Similarly, he brought into his correspondence with Augsburg news and information from Lyons and the wider France, Strasburg, Geneva and Basle. The latest publications, the last plague outbreak, the most recent political changes in France thus came to feed other correspondence networks, but partly relinquished their origin with the name of their author.

As we shall see in the next chapters, this had important consequences for the way knowledge was elaborated in letters.

Conclusion

Correspondence was defined as the most obvious and effective way of exchanging information about nature or medicine, because it enabled scholars to answer two requisites of the elaboration of knowledge. On the one hand, correspondence made collaboration at a distance possible, thus fulfilling the ideal of collaborative knowledge promoted by the Republic of Letters, and meeting the needs of producing a total, exhaustive knowledge. On the other hand, it made it easier to face the variety of the world and the fact that things of nature were specifically located, and granted scholars an access to remote locations and their rare and unknown species. Correspondence brought Gessner and his colleagues, who now they were well established had more difficulties in finding the time to travel, nature,

information and ideas. For this, however, they needed access to people who lived in the remote regions where the plant or the information they wanted was located. Moreover, as correspondence relied on friendship and personal interaction, these correspondents were not only contacts: they were friends, and the way correspondence was established reinforced at a personal, very concrete level, the ideal of friendship depicted by the ideal discourse of the Republic of Letters. Correspondence put on the territories of natural history a grid of local contacts, located geographically and institutionally, but contacts they could trust. It was not, however, only the individual that mattered: besides the ideal tying them together, the existence of communities not based on shared disciplinary interest but merely on a shared location, offered letters an audience, and Gessner a pool of scholars, relationships, and possible intermediaries. It thus shaped the social structures of exchange at several levels: it met the requirements of the discourse of the Republic of Letters, those of the 'Republic of authors' who expected exhaustive knowledge in a published book, by relying on many strong personal ties with local contacts, themselves well-anchored in their local context and local circles.

Such a structure made material exchange the centre of scholarly exchange in early modern Europe. Indeed, letters were packages: the multiplicity of objects they could enclose was important. It also ensured the continuity of correspondence, because it caught the correspondent in a competition of gift exchange in which his own persona as a scholar was at stake. Providing interesting objects in return required, however, an agreement on the value of these gifts. Based on rarity and novelty, epistolary material exchange made it possible for scholars to focus their attention on objects and events, rather than on ideas. But exchange and gift-giving largely depended on the personal circumstances of the correspondents. If letters had to be adapted to their correspondent, so did their contents, including material objects. External constraints, such as money, also played a role in the contents of the exchange, promoting inventories and catalogues, as well as numerous

techniques of conservations of plants. Finally, material exchange was also largely dependent on the outreach of the correspondent, and on his own correspondence networks. The scholarly community was less a big Republic of Letters than a succession, or superimposition of independent personal networks, gathering the personal and the epistolary networks of each correspondent. In centres, cities, universities, scholars were not isolated (nor were they, by the way, in the peripheries) and interacted personally, exchanging news of each other, and often reading each other's letters. Despite the pretence of being a private, intimate tool, letters were often meant to be read collectively, both by the local personal network of the addressee, and by the many intermediaries that relayed mail from one city to another, and Gessner did not hesitate to play on the blurred space letters defined between private and public. The consequences of this practice for social space and scientific practices were important, creating a new way of disseminating information and knowledge that, beneath the books of the Republic of Letters, shaped a multitude of communities and subverted the frontiers of the disciplines by playing with the necessities of mail and of local communication. Between Republic of Letters and race for authorship, between local circles, mail networks, and individuals, correspondence gave Gessner access to nature and to news, and food for thought.

CHAPTER 4: EPISTOLARY PRACTICE

AND MEDICAL PRACTICE

Introduction

Sometimes, the rules of gift-giving and of collaboration became too heavy to bear.* Sometimes, messengers, the weather, and friends all conspired to prevent fruitful, organised material exchange. Sometimes, plants would simply not grow. This chapter is about what happened then: how material exchange was not the only fuel for correspondence, how Gessner made extensive use of news, and medical news especially, that had a good chance to be at hand, and how he used his own, everyday experience to build circulatable information. This chapter is also about how letters, not only as media but also as scholarly and medical formal frameworks, as a place where news happened and as a means of circulating it, shaped this news.

In a first section, I will examine what news, and especially medical news, was made of. What Gessner and his colleagues exchanged were “experiments, cases and stories”, based on the personal experience of their author.

* Parts of this chapter have been presented in Stuttgart, Workshop “Illness narratives”, 2004; Text in Translation Seminar Series, Wellcome Centre for the History of Medicine; 2005; in Tours, Day workshop « Voir et expliquer les maladies à la Renaissance », 2005 and in Conference “Observations in early modern letters, 1500-1650”, Warburg Institute, London 2007

It is, however, impossible for us to grasp this personal experience. All we can do is to examine its tracks, and therefore have a quick look at a specific medical practice that produced news. A considerable part of early modern medical practice, consultation by letter was also a place where news originated. The second section will focus on this space of the consultation by letter in order to attempt to reconstitute how news was born. They were, however, news-in-the-making. How did Gessner transform them into epistolary stories? And what were the consequences of this change?

Section 1: Gessner's medical life: a pool of experience

As I have said in Chapter 2, the cardinal sin of correspondence consisted in sending an empty letter. Gessner struggled with all his might to avoid it. When nothing particularly exciting had happened, he never hesitated to fill up his letters with what was at hand. This could be small roots of *antora* he had a moment before received from Lyons.²⁹⁰ This could be a letter, sent by someone of interest on a crucial subject like plague,²⁹¹ or the result of his own reading and thoughts on a passage of Pliny.²⁹² This could be anything that was at hand, as long as it helped escape vacuity, in the material or intellectual sense of the term.

Gessner thus remonstrated actively to Johannes Cosmas Holtzach, when he thought the latter was breaking the emptiness rule:

But why does your letter come to me devoid of any of the spices of our art? Why don't you write some rare story, as you have collected it? Or something about your experiments: they must be

²⁹⁰ Gessner to Adolf Occo, 22.01.1564, "ne vero inanes literas mitterem, addidi radículas antorae (vel antitorae potius) ut hodie Lugduno accepi", *Ep. Med.*, f. 51r.

²⁹¹ Gessner to Zwinger, 14.07.1564, "Mitto, quae est ad manum, D. Eustathii Quercetani, de pestis curatione, ad me epistolam..." *Ep. Med.*, f. 108v The ambiguous role of letters, between object of knowledge and repository for information is here plainly obvious. I shall examine more of it in Chapter 6.

²⁹² Gessner to Aretius, 01.07.1551, "Sed ne herbarii studii inanes literas mittam: quid his diebus a me in Plinio observatum sit communicabo", *Ep. Med.*, f. 115v.

very numerous and varied, given you have so many occupations As for me, although I am busy with subjects that are not medical, nonetheless from time to time I observe something: and this is what you receive now.²⁹³

Gessner's call for personal involvement in finding contents for the letter was immediately put into practice: he went on by explaining how he himself used a syrup of black and white hellebore against phlegmatic diseases, such as epilepsy, asthma, pleurisy or breathing difficulties. Indeed, answering others' requests and requesting from them was not enough to maintain correspondence: what one should send was a part of one's own life, the result of one's observations. *Historiae* and *experimenta* alike fulfilled sixteenth-century interest in experience. A medieval genre of medical writings, *experimenta* were collections of well-tried remedies, simply indicating the disease for which it was recommended.²⁹⁴ Gessner himself collected them, and many featured in his *Thesaurus Medicinae Practicae*. As for *historiae*, they were a much more complex genre, and less defined as no editorial equivalence existed. To these two items, Gessner added a third: he also asked the same Holtzach for 'quite rare cases', something that was apparently distinct from *historiae* in so far as it did not involve the story was finished.²⁹⁵

On the whole, the most obvious, the pool of information most readily to hand for filling up letters was certainly the correspondents' medical and professional life. It fitted the individual character of the letter, while providing the correspondents – often physicians, as I have shown – with a common ground.

Medical news, in fact, came perhaps more easily to Gessner than exotic plants or paintings of fishes. A botanist at a moment when botany no longer had to struggle to be part of the curriculum of aspiring physicians, he had all the lay contacts required in order to

²⁹³ Gessner to Johannes Cosmas Holtzchius, 23.02.1560, *Ep. Med.*, f. 83r.

²⁹⁴ On *experimenta*, see William Eamon, *Science and the Secrets of Nature, Books of Secrets in Medieval and Early Modern Culture*, Princeton, Princeton University Press, 1994, 83-90 and 112-120.

²⁹⁵ The distinction between *casus* and *historiae* will be made later in this chapter.

get information. As an author, his publication of the *Thesaurus Evonymi Philatri* had met with an Europe-wide success, had been translated into various vernacular languages,²⁹⁶ and earned him recognition in the ‘Republic of physicians’ and a better access to information about plants and remedies than many. A town physician in Zurich,²⁹⁷ he examined midwives, apothecaries, surgeons, and gave advice on authorisations for “empiricists” to practise medicine. Meeting him was thus a necessary step on the path of any medical practitioner in Zurich and the Canton.²⁹⁸ Moreover, he was in charge of the struggle against plague, and any suspicion of epidemic disease was likely to be reported to him.

His epistolary case narratives reflected this anchorage in professional and personal life. Narratives of individual illnesses, predominant between 1553 and 1560, were progressively replaced by notes on epidemic diseases, and disappeared completely after 1563 in favour of plague narratives. The Helvetian Cantons were then invaded by an epidemic plague and the correspondence network solicited for remedies and case histories. For the same reason, discussions about gout and kidney stones coincided with Gessner’s regular attacks. A first-hand source of knowledge on disease, he was, like his patients, a man: and suffered, and felt himself bouts of gout and the pains of kidney stones. Speaking

²⁹⁶ According to Alfredo Serrai, *Conrad Gesner*, 1990, pp.279-286, there were in the sixteenth century twelve Latin editions, as many in French, another half dozen in German, six more in English, and three Italian editions.

²⁹⁷ The power in medical matters placed in Gessner’s hand was considerable. See on this point Gustav A. Wehrli, *Die Krankenanstalten und die öffentlich angestellten Ärzte und Wundärzte im alten Zürich*, Zurich, 1934, who offers a most detailed diachronic study; Bernehard Paul Baumgartner, *Texte zur Zürcher Wundschau von 1534 bis 1654*, Dietikon, Juris Druck, 1997, gives the text of several letters in cases of leprosy addressed to Gessner in his capacity as head of the Wundschau.

²⁹⁸ The question of the relationships between Gessner and other medical practitioners is an interesting one, that would deserve a full study in itself. The relationship with surgeons and apothecaries was, on the basis of the letters, one of almost complete equality. As for other medical practitioners, there seems to have been some mild competition, but no great struggle. Gessner used them as he did his local contacts for plants or animals. The recipes he received from them have exactly the same role in the *Thesaurus* as those he received from doctor colleagues. However, the degree of trust and authority was perhaps not the same.

about his own pain, consulting his colleagues about possible remedies, was also a way to keep the epistolary dialogue going, and to produce medical material.

Just as collecting objects involved adequate correspondents in strategic locations, gathering medical news entailed contacts with numerous and heterogeneous sources. Thus, Gessner resorted to his own correspondence in order to find news on plague he could exchange with Felix Platter, on 23 August 1564:

A friend of mine, now a physician in Strasburg, (his name is Etschenreutter) suffered from the plague several years ago in Tübingen, and was cured. Almost ten months ago, I think, in Strasburg, as he swallowed one ounce of this antidote [*Antidotus Saxonica*], for the sake of self-preservation, and went to bed to sweat, at the same place where he had had a bubo, it sprang up again, but disappeared soon after, and he did not suffer any ill.²⁹⁹

Knowledge could be second-hand: Gessner was happy to circulate hearsay and wonder cures. He did not neglect information about remedies coming from other practitioners. He reported a radical cure given to him by an empiric physician, resting on the seventy-year survival of his informer.³⁰⁰

Patients too were excellent sources of information. His medical practice brought to him sick people, willing guinea-pigs for what he called his experiments, but also people experienced in the treatment of their own diseases.³⁰¹ They came from all layers of Zurich society, bringing information on the treatments dreamed up by all sorts of practitioners. His public duties included the requirement to care for the poor, and visit the hospital everyday. However, he was also free to maintain a private practice, and the cases he reported often belonged to families or households of important men of Zurich: the wives,

²⁹⁹ Gessner to Platter, 23.08.1564, *Ep. Med.*, f. 99r.

³⁰⁰ Gessner to Benedict Aretius, 04.02.1565, *Ep. Med.* f. 120v. The cure consisted in showing a remedy to the infected persons, and was said to be extremely effective.

³⁰¹ The degree of medical knowledge of lay people was apparently considerable in the early modern period. See for instance Roy Porter (ed), *Patients and practitioners: lay perceptions of medicine in pre-industrial society*. Cambridge: Cambridge University Press, 1985.

sons and servants of Zwingli, Guildebeccus, Bullinger consulted him, but also other renowned physicians. Finally, he was also a physician for medical men.³⁰² He unsuccessfully treated a surgeon who cut for the stone, bitten by a mad dog.³⁰³ To another, he prescribed bloodletting for his migraines.³⁰⁴ Patients came to him from Zurich – as did a seventy-year old librarian suffering from pleurisy³⁰⁵ – but also from neighbouring towns of the Canton. He for instance cured of asthma the catholic, “rich and not illiterate” geographer Aegidius Tschudi, who lived a few miles from Zurich,³⁰⁶ and Jacob Keller, a preacher in the village of Pfungen, consulted him once he was taking waters at Baden.³⁰⁷ More generally, rumour was one of the most essential vehicles for medical information. In the middle of a serious plague outbreak, Gessner wrote on 19 June 1562 to Benedictus Aretius:

I have written to you most recently and indicated what I would like our friend M. Jodocus to tell me about the preparation of antimony: but since, I have learned that, not only in Basle but also in Lyons many have died from using it: that is why, in the case of this disease, I would abstain from it, except for someone extremely robust and in the very beginning of the disease, and for whom there is good hope. But for other diseases, like jaundice, unconfirmed dropsy, and especially quartan fever, one can use it safely. I already know that several persons were instantly cured of quartan fever, and, that, these days, someone was cured, coming here from Chur, with whom I have however not yet spoken. When I know with more certitude what he himself says he knows, I will add it some other time.³⁰⁸

³⁰² The explanation certainly resides in the use of consultation by letter and in the confusion, not to say identity of letters of consultation and scholarly letters or news letters, within the correspondence network.

³⁰³ Letter to Holtzach, 06.09.1554, *Ep. Med.*, ff. 81v-82r.

³⁰⁴ Letter to Funck, 21.01.1565, *Ep. Med.*, f. 96r and ZBZ MsF 60.52 (dated 21.01.1564). Case narratives thus give us a fair picture of Gessner’s medical practice, of his patients, of the articulation of his position as a town physician and as a private practitioner, although the number of children is underestimated, for instance. In the *Thesaurus*, many of the cases reported by Gessner – i.e. which survived the double selection by Gessner and by Wolf – concerned children or teenagers.

³⁰⁵ Letter to Jean Bauhin, 07.01.1564, *Epistolae*, p. 140. See below, p. 223.

³⁰⁶ Letter to Occo, 26.12.1563, *Ep. Med.*, f. 49v.

³⁰⁷ Letter to Wolf, 01.09.1560, *Ep. Med.*, f. 123r.

³⁰⁸ Gessner to Aretius, 19.06.1562, *Ep. Med.*, f. 118r.

The mixture of the professional expertise of the Berne apothecary M. Jodocus, of the result of Gessner's inquiries among his correspondents in Basle and Lyons, and of hearsay of patients themselves did not produce certain knowledge of the use of antimony, but certainly fed the exchange of news between correspondents, news whose heterogeneity did not deprive of worth. However, most news came in a most direct, also perhaps less easy way to Gessner: they were the cases he met with in his own medical practice. The weight of personal experience was there considerable: many case notes, collected in the *Thesaurus Medicinae practicae*, reappeared sooner or later in his correspondence. Patients came from all over the Canton to meet Zurich town physician. Sometimes, however, they did not come in person. Instead, they sent a letter.

Section 2: The matter of the news: consultations by letter

Epistolary medical practices

Thus, sometime after 1559, Gessner received a letter of four leafs, written and carefully copied down by Venerand Gabler, a well-established physician in Tübingen. He began by thanking his correspondent for the care he showed for his health, then immediately followed up with what weighed heavily on his mind:

For almost two years now, I have been suffering from (I think) hypochondria, but I feel much worse in winter, almost until April, so that I have had to stay almost entirely in bed for some months.³⁰⁹

He went on by describing the diverse elements of the case: the symptoms of the disease (vomiting and feelings of oppression, palpitations and pallor) as well as their effects

³⁰⁹ "Jam per biennium fere hypochondriaca [sic] (ut puto) laboro, hyeme tamen ad Aprilam usque fere longe deterius habeo, ita ut etiam aliquot mensibus proxime omnino decubuerim." Venerand Gabler to Conrad Gessner, sd, ZBZ ZBZ MsS204b f. 288r.

on Gabler's everyday life: not being able to attend public meetings, for instance. Then, he turned to recent changes, dating from the last winter, and to a thorough description of his urines. Finally a depiction of what we could term the psychological symptoms, exhaustion, loss of appetite, frequent relapses after short episodes of good health. He touchingly concluded:

When I lean over my books I don't feel any discomfort, and no study exhausts me, nor harms me, that is why in this misery nothing delights me nor revives me as much. Hence my head is not weakened yet (which I am often surprised by, but totally understand) : the head in itself is still well, except what it suffers from the inferior limbs.³¹⁰

After this catalogue of signs, he provided a list of his own and others' attempts at curing him from this ailment. Nowhere did Gabler provide a theoretical framework for his disease. The history of the case was thus followed by the symptoms of the disease, and ended with a moving anecdote. A patient had recently died in front of Gabler, plunging him into a fit of sheer terror. Gabler finally introduced his own prognosis, based on the books he had consulted:

Montanus and many others judged this disease to be incurable, and it is frequent around here; I myself have seen many important men suffering from it, but up to now, I have seen no one cured. But almost none of them was as seriously afflicted as I am, nor as continuously.³¹¹

and accounted for the diet and baths he had prescribed to himself.

Although it may seem rather unusual, this consultation by letter, written by one physician to another, and in the same time by a suffering patient to his potential physician,

³¹⁰ "Quando libros incubo nihil fere quod molestum sit sentio, nec ullo studio defatigor, [nec noceor] magis, quare nihil in hac miseria magis me oblectat ac reficit, inde etiam caput non debilitatur, quod saepe miror, sed bene intelligo; caput per se recte adhuc habere, nisi cum ab inferioribus membris laeditur" ZBZ MsS204b f. 289r.

³¹¹ "Hunc affectum Montanus et multi alii incurabilem judicant, estque frequens apud nos, ego ipse multos magnos viros novi qui hoc laborant, nullum tum hactenus curatum vidi. Sed vix aliquis inter eos tam graviter adfligit, ut ego, et fere [continuo]" ZBZ MsS204b ff. 289r-v.

illustrates very well a number of the traditional features of the consultation by letter and of its answer: the *consilium*.

Both forms were inextricably linked in early modern medical practice, in their everyday and in their editorial form.³¹² Patients, for various reasons, wrote to a physician to ask for advice. In return, the physician sent this advice, usually composed of an exposition of the signs, of a history of the patient and then of a prognosis and a prescription.³¹³ In most doctors' libraries, a large part was devoted to a medical literature of *consilia* and consultations, offering a strong rhetorical framework for their own achievements and a practical model for their own face-to-face consultations. Collections of *consilia* were everywhere in Europe, since the thirteenth century. In Gessner's library, well-read and annotated copies of several collections had a place: Giovanni da Monte's *Consilia*, Amatus Lusitanus' *Curationes*, Massa's and Manardi's *Epistolae Medicinales*.³¹⁴ In the *Thesaurus Medicinae Practicae* as well, many *consilia* were copied down. Most entries include a copy of a *consilium* by Helideus for the disease, and the section on Epilepsy includes also *consilia* from other authors, like Jean Fernel, all thoroughly annotated.

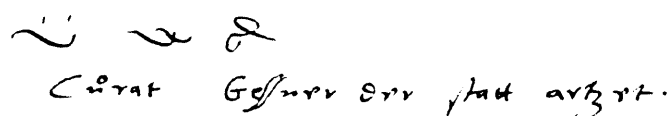
Among Gessner's letters, many were in fact consultations or answers to consultations. In the *Epistolarum Medicinalium libri III*, 20 out of 209 letters submitted a case

³¹² It may be the reason why collections of *consilia* frequently included the letter sent (sometimes hypothetically) by the patient.

³¹³ Jole Agrimi and Chiara Crisciani, in *Les consilia médicaux*, Turnhout, Brepols, 1994 demonstrate that what was presented as an account of an individual case was in fact a study of a specific disease, not of a specific patient. This, however, is valid for *consilia* as an editorial genre. If it served as a model in the practice of consultations by letter, the real practice of *consilia*, as far as I have been able to judge from Gessner's *consilia*, was to some extent more individualised, as we shall see.

³¹⁴ Giovanni Batista da Monte, *Consilia medica omnia*, Nuremberg, Johannes Montanus and Ulricus Neuber, 1559; Amatus Lusitanus, *Curationum medicinalium centuria secunda*, Venice, Vincenzo Valgrisi, 1552; Nicolaus Massa, *Epistolarum Medicinalium tomus alter*, Venice, Zilletti, 1558; Giovanni Manardi, *Epistolarum medicinalium libri XX*, Basle, Isengrinus, 1540. This list may well be very incomplete, and is based on Urs Leu's provisional inventory of Gessner's library.

for advice or answered a consultation by letter. Among Gessner's papers collected in the *Thesaurus Medicinae Practicae* were 47 consultations and *consilia* in erudite Latin or vernacular German.³¹⁵ Their material presentation differed substantially from that of working letters. They were often copied by amanuenses.³¹⁶ Many were partly written in German, with a clear separation between the normal parts of the *consilium*. These *consilia* were professional achievements, and were invested with their author's medical authority, either as a Town physician or as a learned philosopher, as in the case of Placotomus.



Curat Gessner dnr. p. lat. arzt.

Figure 12: Gessner's signature on a consilium (MsS204a134r)

Predictably, epistolary consultations dealt with chronic ailments, which did not necessitate instantaneous answers and treatments: melancholia hypochondriaca, but also epilepsy, dropsy, kidney stones, headaches and pleurisy and blood spitting. A few of them also concerned minor and not life-threatening afflictions: Jean Bauhin, for instance, consulted Gessner regarding the problem of a woman who had two rows of eyelashes.³¹⁷

³¹⁵ A list of these consultations is given in Appendix IV. Although many were anonymous, they give us a very lively idea of what it was like to be a patient, or a physician in the early modern period. I have limited my list to what appeared really as letters, and not included all the *consilia* given by Gessner, among which many are simply notes for drafts.

³¹⁶ See for instance Gessner's *consilium* to Placotomus regarding his sight problems, ZBZ MsC50a18.

³¹⁷ ZBZ MsS204a 205r. The complete printed version can be found in the letter from Jean Bauhin, 20.10.1562, *Epistolae*, 1591, pp.115-116. See Appendix IV.

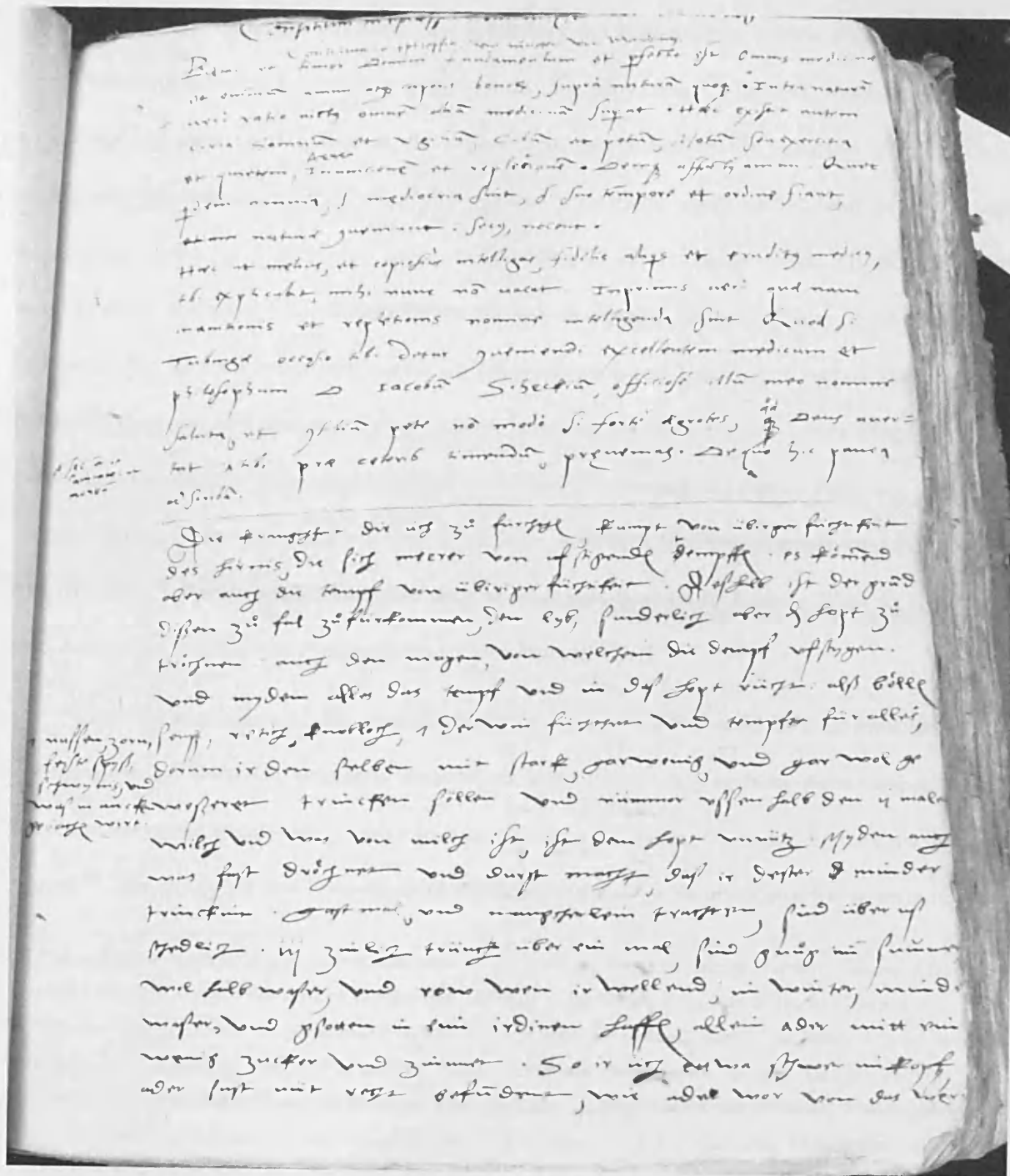


Figure 13: A consilium in Latin and German redacted by Gessner (ZBZ MsS204a 133r)

As this last example suggests, the epistolary consultations received by Gessner were not a correspondence between a patient and his physician.³¹⁸ Just as Venerand Gabler wrote on his own behalf, but at the same time never forgot his position of physician, diagnosing his affliction, indicating the advice of medical authorities, dead or alive, and suggesting paths of treatment, most of Gessner's letters came from physicians from neighbouring towns, who consulted him on one or several difficult cases, or on their own ill-health. He advised Johannes Funck (in Memmingen) and Johannes Cosmas Holtzach (in Schaffhausen) on the health of their wives, wrote a *consilium* for Johannes Placotomus, a physician in Zurich experiencing eye-problems.³¹⁹ Alexander Peier, Fridolin Brunner, Georg Pictor, Gallus Etschenreutter in Strasburg also sent him problematic cases or similar information.³²⁰ Reciprocally, Gessner sent at least one patient to Caspar Wolf in Zurich,³²¹ and consulted for himself Holtzach and Felix Platter.³²²

Gessner's *consilia* and his consultations by letter thus featured as a normal means of communication between scholars. Instead of virtually calling for him, patients had called for their very real, local doctor, who in turn wrote to Gessner, i.e. to an ancient master or a friend.³²³ The study of the consultations by letter of Zurich town physician is thus not the

³¹⁸ The only letters emanating directly from patients we have are those of Samuel Kesler, Venerand Gabler, a physician himself, and a letter sent by Jacob Hugo the son to his father, then forwarded to Gessner.

³¹⁹ See for instance letter to Johannes Funck, "the day after Pentecost, 1564", *Ep. Med.*, f. 94v; letter to Holtzach, 15.11.1560, *Ep. Med.*, f. 84r; and *consilium* for Johannes Placotomus, *Ep. Med.*, ff. 136v-137v.

³²⁰ Letter from Alexander Peier, 16.05.1554, ZBZ MsS204b f. 23r; letter from Brunner, 4 November, s.a., ZBZ MsS204c, f. 78r; letter from Georg Pictor, 10 October s.a., ZBZ MsS204a, f.150r-151v; letter from Gallus Etschenreutter, s.d., ZBZ MsS204c, 92r-v.

³²¹ Jakob Cellarius, Letter to Wolf, 01.09.1560, *Ep. Med.*, f. 123r.

³²² Letter to Holtzach, 15.11.1560, *Ep. Med.*, ff. 83v-84r and letter to Platter, 22.03.1563, *Ep. Med.*, f.98r.

³²³ The practice of the consultation by letter has justly attracted, in recent years, a good deal of notice from historians who wanted to understand the patient and his relationship both to his disease and to his physician(s) better and wished to displace the traditional stress historians of medicine put on the doctor. However, they mostly dealt with the 18th century. Moreover, in Gessner's case, the state of our sources does not allow such analyses: we have very few letters written by the patients themselves. Michael Stolberg, *Homo patiens* (2003) offers a diachronic study of the problem. Concerning consultation by correspondence, see

study of a patient-doctor relationship, but of a triangular relation: between a patient, his local doctor and a senior doctor.

The *consilia* shared this ambiguous double destination: officially addressed to the patient, those which assume an epistolary form often mingled German and Latin, in various proportions, thus holding a double discourse: one for the patient and one for the physician. They did not always necessitate a specific support, but were included in the same envelope as other types of communications, or even constituted a part of a letter otherwise dealing with plants, friends or material issues. Consultations by letter and *consilia* thus sometimes proved extremely difficult to distinguish from scholarly newsletters.

Consulting by letter

The relationship between the three actors of the consultation by letter was however not simple, even within a single city. In Winterthur, Gessner directly supervised the headaches of Samuel Kesler and also exchanged a series of consultations by letter with the local town physician, Conrad Forer. Previously a student of his, Forer reported his difficult cases to his former master until 1565. While only two letters from the later to his master remain, we still have Gessner's prescriptions in seven cases. Consulting a Zurich town physician was certainly no trifle. Either the patient had a personal relationship with one of

particularly Laurence Brockliss, "The medical practice of Etienne-François Geoffroy" in: Ann La Berge and Mordechai Feingold (eds) *French medical culture in the nineteenth century*, Amsterdam-Atlanta: Rodopi, 1994, 79–117; Michael Stolberg, "Mein askulapisches Orakel!", *Patientenbriefe als Quelle einer Kulturgeschichte der Krankheitserfahrung im 18. Jahrhundert*, *Österreichische Zeitschrift für Geschichtswissenschaften* 7(1996), 385–404; Joan Lane, "The doctor scolds me: the diaries and correspondence of patients in eighteenth century England" in Roy Porter (ed.), *Patients and practioners: lay perceptions of medicine in pre-industrial society*. Cambridge, Cambridge University Press, 1985, 205–48; Dorothy Porter and Roy Porter, *Patient's progress. Doctors and doctoring in eighteenth-century England*, Cambridge, Polity Press, 1989, pp.76-78; E. Foster, "From the patient's point of view: illness and health in the letters of Liselotte von der Pfalz (1652–1722)", *Bulletin of the History of Medicine* 60 (1986) 297–320, Séverine Pilloud, Stefan Hächler and Vincent Barras: "Consulter par lettre au XVIIIe siècle", *Gesnerus* 61 (2004), 232-253.

the physicians (among the patients were Forer's sister-in-law and his brother) or the case was interesting because it was serious (as in the cases of two women, suffering from postpartum melancholy and breathing difficulties, and of a melancholic man) or because it afflicted an important man: the two correspondents thus discussed the case of Ambrosius Blaurer, a famous Reformer and a correspondent of Gessner (and earlier of Zwingli). Sometimes, the case united all these characteristics: a rare and serious disease involving a member of the physician's family: a butcher suffering, as we shall see, from a peculiar form of epilepsy was also related to Forer's nephew.

Conforming to the general characteristics of consultations by letter, these exchanges reflected the hierarchy between the two men. Several of Gessner's letters began by admonitions to Forer about his handwriting, and the amount of time it took to read a letter. The latter answered by calling Gessner his "preceptor", a title he usually refused, but that implied a personal and pedagogical relationship,³²⁴ reinforced by Forer's minor collaboration in his colleague's naturalist enterprise when he translated the first and fourth book of his *Historia Animalium* into German in 1563.³²⁵ The illnesses requiring the consultation by letter were chronic and serious, as were the usual complaints treated by authors writing *consilia*, in order to justify the involvement of a senior physician.³²⁶

³²⁴ This model of consultation by letter, based on a local physician consulting his senior official physician, paralleled strictly the usual scheme of the correspondence exchange, as Gessner's correspondence network defined it, alternating between local relay and larger reach. The problem of such joint consultations deserves a study in itself, because, besides the issues of patronage and of court medicine it involves, it seems one of the organising principles of the early modern elaboration of knowledge.

³²⁵ *Fisch-Buch*, Zurich, Froschauer, 1563 and *Thierbuch*, Zurich, Froschauer, 1563.

³²⁶ However, neither Forer's letter nor Gessner's answer fitted entirely the formal constraints of the *consilium* genre. See illustrations in Appendix IV. The disposition of their letters is less formal. Gessner scolded Forer for the haste with which he wrote his letters, although his own letters did not really differ from his other everyday letters: the letter is covered with marginal postscripts and additions, and Gessner did not limit himself to the boundaries of the consultation but discussed other patients or the reimbursement of a loan. His prescription was scribbled on a separate leaf. The letters mixed indistinctly Latin, Greek and German, sometimes in the same sentence. This contrasted greatly with Gessner's official *consilia*, often written in the

Epilepsy was therefore a favourite subject in these collections, and the illness afflicting a patient Forer in a first letter immediately introduced as a good, honest and pious man, a relative, and a butcher. Thereby, he inserted the patient in the great fraternity of the Republic of physicians, despite a profession rather remote from the usual humanist circles.³²⁷ He pursued his *captatio benevolentiae* by stating the interest of the case for Gessner. It was, he said, a rare case with cruel symptoms. Thus justifying his call for help by the difficulty of the problem at hand, he also reminded his reader that this consultation by letter was also a potential case for his collections. The object was in fact double: to help in a difficult case and to replenish the epistolary exchange by giving something to think about to the correspondent.

Forer then set out the problem. He began with the only tangible element of this peculiar consultation: a flask of urine, that came along with the text of the letter. Urine was a necessary element of the diagnosis process,³²⁸ by means of which Gessner had to read and smell the symptoms of the illness. He narrated the history of the patient, who had been treated for syphilis before by a physician from Zurich called David.³²⁹ He attributed the appearance of epilepsy to the concentration of bad humours in the head and the brain caused by fumigations prescribed by David. Syphilis had thus turned into an epileptic

vernacular, and signed with all the weighty authority of "Conrad Gessner Stadtarzt". These official and authoritative acts were extremely structured, and the analysis of signs, the diagnosis and the diet and treatments followed each other in the prescribed order. In Forer and Gessner's case, the consultation by letter was no official text: it was the result of a relationship based on trust and advice between two hierarchically unequal physicians, and on a continuous dialogue favouring a relative familiarity.

³²⁷ As befitted any introduction of a new person in a scholarly correspondence network, the author took care to establish a link between the patient and the physician giving the consultation, if possible through friends.

³²⁸ Gessner had himself published a compendium on uroscopy: *Compendium ex Actuarii Zachariae Libris De differentiis urinarum judiciis et praevidentiis*, Zurich, Christoph Froschauer, [1541].

³²⁹ This David, after being named several times in Gessner's letters was then the object of a scandal (of unknown nature). Apparently, he was no physician, but a quack.

disease (*epilepticus morbus*). Forer thus based his diagnosis on the history of the patient, rather than on the symptoms.

A description of the effects and symptoms followed. As was usual in early modern medicine, Forer carefully reported the words, feelings, and metaphors used by the patient:

When he has his fits, and during them, he says he feels as if something cold was discharged on him (like a spoon full of cold water) and if it was running down him; that is more or less how he says he felt.³³⁰

Certainly quoting, as indicated by the repeated 'ait', 'he says', he in turn described for Gessner the feeling of cold characteristic of epilepsy, despite the hot baths of steaming water, and more problematic aspects of the diagnosis. The patient felt a general pain in his head, before and during the crises, but restricted to the brain. He looked well, and claimed he was. A large part of the *casus* thus consisted in conveying the patient's words to the colleague being consulted. Obviously, letters, a 'mirror for the self', were an ideal medium for such devices. They mitigated the absence of the physician from the bedside. Gessner himself felt the efficacy of this device. When he described his own case to colleagues, he dwelled on the excruciating pain he felt when suffering from gout or stones.³³¹

The tone of Forer's discourse suddenly changed, and he abandoned his patient's words in order to present the results of his examination, mimicking a face-to-face consultation. The complexion provided a first assessment of the patient's temperament. Then, several symptoms came in: a strange feeling in his head before fits, marked by an absence of pain everywhere, a feebleness in the stomach revealed by a slow transit, and a

³³⁰ "Ut access[iones] suas habet, et in ipsis, quasi frigidum quoddam, (veluti [cochlearium] aquae frigidae plenum) effundere[tur], se sentire ait, atque id <> tot versus defluere : sic quodammodo se persensisse<> ait" Forer to Gessner, ZBZMsS204a136v.

³³¹ This insistence on the words of the patients when describing their own pain appears in practically all the consultations by letter I have been able to trace. Perhaps the best example is this consultation of Etschenreutter, describing a sexual problem experienced by a patient. ZBZ MsS204c 92r-v. See Appendix IV.

pervasive feeling of cold in the brain, in spite of sessions of perspiration. Forer seemed to take down the patient's dictation, more than following a pre-defined order.

The epistolary form functioned as a substitute for intimacy. Letters stressed the history and the point of view of the patient, and underlined the moments associated with the start of the disease and the feelings of the patient. The degree of conscience remaining was carefully determined while the fits were almost not described, although they certainly were the most spectacular part of the disease: no external point of view appeared in the letter.

This discourse on the disease in itself remained quite short. Forer had to keep it brief, and avoid a long read.³³² This letter was not, so to speak, the space for lengthy theoretical developments, or even for detailed analysis of signs. Moreover, the disease was interesting insofar as it was incarnated in a specific individual: the consultation by letter, here, was centred on a very real, very personal patient, not a mask for a patient emblematic of a disease. The humoral explanations attached to epilepsy by Gessner and certainly by Forer reinforced this personification. Epilepsy was not perceived as an external entity, attacking the patient, but as a condition.³³³

Moreover, the symptoms describing the disease were limited to those that could make sense in an epistolary dialogue. For instance, urine was the only possible physical contact with the patient, and therefore the main means of diagnosis. Similarly, the letter sounds as if it was the result of writing down the patient's discourse: words, but no other external sign transpired. The importance given to the history and beginning of the case, the close following of the patient's thought, the recourse to uroscopy, closely linked to

³³² No such preoccupation existed when Gessner was directly contacted by an erudite patient, such as Venerand Gabler.

³³³ The best account of the understanding of epilepsy up to now is given by Owsei Temkin in *The falling sickness : a history of epilepsy from the Greeks to the beginnings of modern neurology*, Baltimore, The Johns Hopkins Press, ed 2, 1971.

everyday life and personal history, all this contributed to give to the case a chronological dimension, just like for material objects exchanged in the correspondence network.

Never a closed case

Gessner apparently accepted without further ado the diagnosis of Forer.³³⁴ He simply noted in the margin of Forer's first letter the age of the patient (38) and his own summary of the case "a remarkable case of epilepsy caused by fumigations".³³⁵ Epilepsy had no precise definition, and was known for its multifarious manifestations: no doubt Gessner could have included the diagnosis in his idea of what epilepsy was: a cold and wet disease, afflicting men and women alike, characterised by repeated fits.³³⁶ His first answer to Forer's request shows how he constructed his treatment according to contemporaneous theories about epilepsy. The first treatment aimed at warming the body and evacuating cold humours: mostly based on frictions and rubbings, and on oils and distilled water. It also forbade attendance at church in order to put limits on the patient's imagination.

However, Gessner's answer was striking. It contrasted strongly with the way the process of diagnosis and of consultations took into account the individual patient. In the choice of the treatment, he did not mention any individual *criterium*. The only justification

³³⁴ Moreover, the *consilium* presents no theoretical research on the case. As shown by the treatment prescribed by Gessner (fumigations and head rubbings, as well as remedies supposed to dry and heat the head (thick powder of odorant plants), both physicians seem to share a Galenic understanding of the disease, as the arising of phlegmatic humours in the head, and as a cold and wet disease. However, this is made apparent by the prescriptions made by Gessner –avoid the cold, use warming remedies – and not by any explicit attempt of theorising or explaining the causes of the disease. And this, when Gessner was well aware that the causes ascribed to the disease were challenged, as shown in an annotated copy he made of a *consilium* by the Parisian Jean Fernel. The only other kind of search for causes is the ascription of epileptic strokes to imagination.

³³⁵ « Epilepsia mira post suffumigationes » ZBZ MsS204a135v. Interestingly, the summary of the case insists on the rarity and wonder of the case.

³³⁶ See Candice Delisle, « Une maladie rare aux symptômes cruels : représentations de l'épilepsie dans la correspondance de Conrad Gessner (1516-1565) », *Epilepsies, Revue de la ligue française et de l'ligue francophones contre l'épilepsie, numéro spécial Epilepsie et Renaissance*, and Chapter 6.

of his choices was the season of the year, winter being contrary to purgative remedies. The advice remained very general: each remedy offered a choice of ingredients to Forer, who remained extremely present, rhetorically, in the letter as the one who makes the medical acts, while Gessner was confined to the provision of remedies:

I would like you to deliberate and decide yourself about the butcher: because you are always present and you see the changes. This season is unsuitable for remedies. You should have completely avoided cold air; indeed, cold is thought to be even more harmful in a church because of the silence, and the more so to melancholic people, among the ranks of which one adds epileptics.³³⁷

The consultation about the butcher was followed in the letter by a consultation for a melancholic woman. Among other remedies, Gessner prescribed a preparation of *karabe*. He concluded: "If it doesn't please her, you can give it to the butcher."³³⁸

All this created a sense of general advice given to a particular physician, but not to a particular patient, relatively little present, and always passive:

Let a linen cloth be filled with a thick powder of smelling products apt to dry the brain, like *majorana*, *nigella*, *iris*, *oregano*, or flowers of *serpyllus*, with *caryophyllis*, etc.

[...] Of the oil that I send (it is, in fact, a mixture of *spica* and *larigna*), let him take around 7 drops, sometimes in the evening, three hours before dinner, in a spoonful of water in which *rupa* has boiled, and sometimes in the morning, and eat moreover some sugar, or *diacalamentum*, either everyday or every 3 days too, according to what seems best to you.³³⁹

Gessner founded his medical fame on his knowledge of plants and on his ability to prescribe good and effective remedies. These had to work. However, the distance made it difficult for him to assess the efficacy of his treatment. Forer's second letter fulfilled this role, by listing the efficacy of each remedy. And its answer was strikingly different from the first one. This time, the prescription was orientated towards the particulars of the case.

³³⁷ Gessner to Conrad Forer, s.d., *Ep. Med.*, f. 125v.

³³⁸ *Ep. Med.*, f. 126r.

³³⁹ Gessner to Forer, 05.01.1565, *Ep. Med.*, ff. 125v-126r.

What you write about the epileptic butcher terrifies me so much, that I would judge the disease incurable, very-learned Forer. And the examination of the urine, full of a thick and viscose sediment, has increased that fear; added to that is the absence of pain, and the season; and the age of the sick man himself, and the incertitude about his will to submit docilely to remedies and to keep a diet over a long period of time.³⁴⁰

Gessner, out of a series of reasons linked to the individual patient, formed a prognosis. He thus provided a precise and extensive diet, of which the patient was the main actor.

Once he has completely consumed this remedy, let him take pills, certainly 5 at bedtime, and the other 7 the next day, very early in the morning; and let him sleep for two hours more; when he rises, he should drink a decoction of chickpeas with hyssop and without salt or butter.³⁴¹

Why such a change? An answer can be found in another bunch of letters exchanged with Winterthur, apparently without the medium of Forer. In 1562, pastor Samuel Kesler consulted Gessner for a violent headache. We do not have this first contact, but Gessner's answers and two of the following letters from Kesler still exist.

In his first letter, Gessner prescribed a series of remedies against headache. Pills of *mastichina* to swallow, oil of *euphorb* for rubbing his temples, *xylina lana* to use for ear drops, and a powder to brush his teeth. Kesler assessed these remedies in his next letter, apparently lost, and Gessner answered:

Your persistent headache is too serious, I see, to yield to weak medicines. The remedies I have prescribed were quite mild, and too weak for what your disease needs; but I did not dare to give you something stronger to begin with and without having explored your nature.³⁴²

And he prescribed stronger remedies. What is interesting here is the method used to compensate for the absence of his patient. Letters were part of an ongoing dialogue, and

³⁴⁰ *Ep. Med.*, f. 127v.

³⁴¹ *Ep. Med.*, f. 128r.

³⁴² Gessner to Kesler, 02.01.1562, *Ep. Med.*, f. 128v-129r.

therefore authorised adjustments. Gessner thus used a two-step practice. He first tried, through mild remedies, to get a general appraisal of the patient, and then proposed an individual prescription, before at last submitting to adjustments in the therapy. The sheet bearing the prescription accompanying the letter was then sent back to him, and copiously annotated by him, in his assessment of the remedies.

The same method seems to have been used for the epileptic butcher: after a very general prescription, assessed and updated by Forer, Gessner prescribed remedies more adapted to the individual case. Consultations by letter thus existed because they were born of a dialogue. And this dialogue meant that Zurich town physician could both focus on the history of the patient and on the individual details, and go chronologically from general advice towards a treatment of the particulars of the case.³⁴³ But it also meant something else: the exchange of cases, in the framework of the consultation by letter, was an exchange of news-in-the-making, because no denouement had been reached. Such news still belonged to the epistolary time, because the events could always pursue their course: the remedies prescribed could fail; the patient could choose not to obey them.

This fluctuating position between the particular and the general underwent another move when the consultation was extracted from the initial dialogue – between patient and doctor, or between colleagues – and transferred to another: the one Gessner maintained with other scholars, often under the guise of case narratives. Protected from the tensions of

³⁴³ Are these experimental therapeutics linked with the induction of a standard prescription in cases of epilepsy? Of this I am not sure: among the almost twenty cases collected in the *Thesaurus* about epilepsy, and the number of recipes copied from books, or gathered from other practitioners, none is exactly the same. However, I think there is a parallel to be drawn with a note in the *Thesaurus* on Paralysis [ZBZ MsS204a109r, see Appendix IV, 4]. After copying considerations on a specific kind of paralysis made by Aeginetus, Gessner listed the cases of paralysis he has seen, and their broad circumstances. Then follows a series of seven questions, entitled *consilium*, and obviously coming from the list of cases. While there is no standard drug elaborated, this *consilium* lists the main characteristics of a standardised treatment of paralysis, drawn from specific cases.

medical emergency, or at least, from the burden of having to find a remedy for the patient, correspondents could exchange closed cases. How did personal histories and standard treatments become the ‘rare stories’ and ‘many experiments’ Gessner demanded?

Section 3: Closing the case: from *historiae* in the making to story telling

Sometimes, however, death or a successful cure seemed to close the case. Gessner immediately seized it and turned it into a case narrative, or a case history. Nearly one hundred of the 209 letters collected in 1577 involved case narratives. They dealt with migraine, plague and a variety of fevers, kidney and bladder stones, epilepsy, melancholy, women’s diseases and varicose veins, ophthalmic problems (cataract, double vision, or myopia), whooping cough, rage, gout, worms, or even a beetle invasion of the belly.³⁴⁴ These are merely a few instances, and many other diseases appear under the generic term of *morbus*. Similarly, the letters collected in the *Thesaurus Medicinae Practicae* include, besides consultations by letter I will examine soon, case narratives on erection troubles, a baby born without an anus, headaches, eye problems, several epidemic diseases, and a variety of ailments.

Case narratives

A traditional form of ancient and medieval medicine, the case narrative met with great success in the early modern period but has only recently attracted the interest of historians of medicine who saw in it not merely the illustration of a practice, but an art in

³⁴⁴ Gessner to Funck, May 1564, *Ep. Med.*, f 94v.

itself, that conditioned the understanding of disease as well as the practice of medicine.³⁴⁵

Gianna Pomata has magisterially demonstrated the filiations of the new genres of *Observationes* and *Curationes* with Ancient and medieval *consilia*, and shown how these new models fitted in a new interest in the observation of individual cases. But in Gessner's case, there was no question of publication: if some *Curationes* were beginning to appear, and met with success – those of Mundella, those of Johannes Montanus, both in his library, often quoted and visibly well-worn – what he circulated in his letters answered another, more down-to-earth necessity: that of feeding the epistolary exchange. His case narratives – those he received from friends and those he wrote himself – were thus food for thought, not knowledge established by publication. But neither were they raw material: as we shall see, the writing of his epistolary case histories in itself transformed the nature of the case, of the consultation, by dislodging the highlights from the history of the patient to a history of the cure and of the case.

It may well be in this editorial success of case *historiae* that a relative standardisation of the case narratives originates. The habit of reading such *consilia* certainly involved striking parallels between the different case narratives written by Gessner. Thus, his way of presenting, say, a case of colic

I cured these days a man with the bowels blocked by colic, not without fever, as he threw up everything etc.; first by the injection of a common clyster, which had no effect, then by another

³⁴⁵ The most recent and most complete paper on the subject is Gianna Pomata, “*Praxis historialis*: The Uses of Historia in Early Modern Medicine”, in *Historia. Empiricism and Erudition in Early Modern Europe*, Gianna Pomata and Nancy G. Siraisi (eds), Cambridge / London, The MIT Press, 2005, 105-146. Vivian Nutton covers earlier material in his paper “Pieter van der Foreest and the plagues of Europe: Some observations on *Observationes*” in H. L. Houtzagers (ed), *Pieter van Foreest. Een Hollands medicus in de zestiende eeuw*, Amsterdam, Rodopi, 1989. Both Vivian Nutton, in “Case histories in the early Renaissance” paper given at Stuttgart conference “The History of Case histories” 1991 and Nancy Siraisi, in *The clock and the mirror. Girolamo Cardano and Renaissance medicine*, Princeton, Princeton University Press, 1997 trace the origin of case histories to Galen, while Pedro Lain Entralgo, *La Historia clínica, historia y teoría del relato patográfico*, Madrid, Consejo superior de investigaciones científicas, 1950, associated it with a more detached, purely narrative Hippocratic history.

made solely with the urine of children, which loosened excellently and quietened the vomiting, but not the pain in his belly. That's why I prescribed an infusion of laxative and anodyne herbs, melilot, chamomille, mauve, and soon, all pain quietened, (thank God) he recovered.³⁴⁶

strangely echoed his words in another letter:

With your penultimate letter, you gave me an Antimony very beautifully prepared and almost similar to hyacinth: and I thank you very much for it, even if I had already received one similar from friends before. You ask my judgment about it, and, because of my hurry, I have said nothing in my last letter, if I am not mistaken. Johannes Crato, physician of the Emperor, a man of great erudition and a friend of mine, does not approve of its use especially in the case of plague (when precisely many recommend it) because it weakens the strength among other symptoms, and provokes a great narrowing of the heart; and I myself learned from experience a few months ago that this is true: I gave indeed to a certain melancholic young man four or five seeds with some rose jam; whence he was incredibly weakened, and suffered so much pain in his head and around the heart that I was very affected by the sight of his sufferings. After he threw up several times, his intestines were partly evacuated, and the day after he felt better; I have used my oxymel with more safety, eight to ten drachms are to be administered, with some decoction, like of *raphani* bark, or something else, that provokes throwing up, etc, as I have written to you elsewhere.³⁴⁷

Successful or risky, a similar scheme was used for both narratives, with slight variations. After the diagnosis, intimately linked with the presentation of the patient, Gessner anchored his positive result in the present time: the whole narrative is thus centred on his action. He then described the symptoms, and the different remedies used and their results. He closed his narrative on the final positive result and a thanksgiving. These are short narratives: Gessner usually had little time to spare for his correspondence, and rarely treats any subject in great length. The diagnosis of the disease remained closely related to the suffering person. Moreover, the stress shifted from diagnosis to remedies and

³⁴⁶ Gessner to Holtzach, 18.07.1561, *Ep. Med.*, f. 85r.

³⁴⁷ Gessner to Culmann, 25.06.1563, *Ep. Med.*, ff. 44v-45r.

therapeutics, and therefore to Gessner's action on the pain of the patient. The patient's pain was what authorises the evaluation of the effectiveness of the remedy: once the pain has been entirely removed, he declared the patient cured. He therefore created a general formal content for every illness narrative.

This general form of the epistolary case history paralleled the model of the consultation by letter. Indeed, they obeyed similar imperatives. Letters were addressed to someone (contrary to, let's say, a diary), and to someone who was absent. While in the consultation by letter, the stakes for the consulted physicians consisted in being able to grasp the essential features of the case, for the absent reader of case narratives, the problem was to assess the value of the case, despite not being at the bedside. Although Gessner's authority, when writing about illness, carried certainly great weight in this assessment process, his claims for autopsy and for experiment made it necessary for him to solve the problem of his correspondent's absence from the bedside. The letter nonetheless offered Gessner and his correspondents a compensation for their absence: it provided them with a view of the bedside. On the 18 April 1565, he concluded a letter in these words:

I will add that as a corollary. These days, a young man 19 years old came to me: last year, he had suffered a quartan fever, which left him, I think, around the first of January; a little afterwards, he fell into a quotidian fever (although it may rather have been a triple tertian fever), which severely afflicted him for six months; when he consulted me and explained that to me, I prescribed the use of my oxymel for three days, almost in these terms:

R: Mix four drachms of our minor oxymel, and 2 drachms of the major, 3 ounces of syrup of Eupatorium, and up to two ounces and a half of waters of *foeniculum*, of *absinthum*, of *cichorium* (distilled through a bladder, so that they will retain the smell and taste); and you shall drink it for 4 meals. On the fourth day he came to me and indicated that he felt much better; but the fever still remained. Whereupon I gave him a chestnut or a nut of sap of *gentiana* (which I keep at home) and ordered him to swallow half of it one day, and the other half on the next day. He did

it and on both days, one hour after he had swallowed the sap, he vomited somewhat. The fever immediately and completely went away, and has not come back for now many days...³⁴⁸

Here, Gessner sought to recreate the consultation. Numerous mentions of the different actions of the patient, and especially of his meetings with his physician (“he came to me, he consulted me, he explained to me, he indicated, he did it”) create a dynamic in the narrative. Using the reported speech in order to translate the patient’s own words, Gessner also employed modal terms (“I think”, “although it may rather have been”) so as to mark the difference between his own discourse and that of the patient. However, the incorporation of the patient’s discourse in the case narrative conferred on the narrative a vivid aspect and mixed both discourses in an undistinguishable blend. Who, for instance, said: “He did it and on both days, one hour after he had swallowed the sap, he threw up copiously”? Here, Gessner clearly reported the fact from what he had heard from his patient: his cases narratives were also illness narratives.

He dramatised as well the meeting between patient and physician in this letter to Johannes Funck, dated from the 19 November 1564:

This remedy also revives desperately ill people. Lately, to a young woman asking for our advice three days after taking to her bed, we gave two spoonfuls: whereupon, as she immediately felt better around the heart, and had not sweated before, we gave her a little later a sweat-making remedy, she sweated and recovered, thank God. When a certain woman had given this remedy, which she had received from us, to a man who was also desperately ill, he said: “This remedy beats all the remedies the doctors have given until now”. I could add several testimonies, but these are enough.³⁴⁹

The two cases, one by insisting on the activity of the patient and the consultation with the physician which rescued him, and the other by using the dramatic direct speech, dramatised the illness and made a hero out of Gessner. He was the way to the cure: the one

³⁴⁸ Gessner to Occo, 18.04.1565, *Ep. Med.*, f. 74v.

³⁴⁹ Gessner to Funck, 19.11.1564, *Ep. Med.*, f. 95r.

the young woman came to ask for advice, and the one who provided the remedy which saved the man. The humour of the direct speech, chastising the ineffectiveness of *medici* while the remedy comes from a *medicus*, certainly adds to the effect, just as the accumulation of cases does – and sometimes just as the multiple new developments in the cases do.³⁵⁰

This dramatisation had two consequences. On the one hand, it put the stress not on the individual patient, but on his encounter with the physician, in the straight line of Galenic self-advertising case histories. On the other hand, it created a living picture of the illness, and therefore placed his correspondent in a position where he can see and hear the patient, and thus fully appreciate Gessner's virtuosity and knowledge. Finally, it made reading a pleasure, something that cannot be neglected in the epistolary framework.³⁵¹

Changing the history of disease

Liveliness, self-advertisement and faithful accounts changed the way scholars began, during the sixteenth century, to look at news and medical cases. It has been argued that what counted was the interest of scholars in the particular case. But, in collections of case narratives as well as in Gessner's letters, the transformation of the individual consultation by letter or of the individual interview with the patient into epistolary material was not neutral: it shaped as well the way physicians looked at particulars.

The dramatisation, or the mimicking of the face-to-face consultation did not operate identically for consultations by letter and for case narratives. In epistolary consultations, the

³⁵⁰ Many illness narratives present an accumulation of new developments in the case: the patient seems to recover, but afterwards shows new symptoms which necessitate new treatments. See for instance Gessner to Holtzach, 18 July 1561, *Ep. Med.*, ff. 85r-v.

³⁵¹ By then, case narratives were on the verge of becoming one of the most appreciated medical genres, which combined a pleasurable read with instructiveness. Felix Platter, one of Gessner's correspondents, later published his own *Observationes* with this double, practical and rhetorical aim. Gessner's correspondents wrote more or less in the same way. See Katharina Huber, *Felix Platters "Observationes", Studien zum frühneuzeitlichen Gesundheitswesen in Basle*, Basle, Schwabe, 2003.

chronology of the course of the disease mattered. Moreover, it was in the move between the patient and the physician, between their respective towns, that a cure was found.

By contrast, in Gessner's case narratives, the cure is, so to speak, a given. The narrative actually began by the issue of the case:

These days, I cured very inflamed tonsils in a woman, and I recently advised a woman with a lachrymal fistula to have her sublingual veins cut, and to purge herself with some pills, etc. and she felt better from it.³⁵²

Summarised in a single sentence, two different cases were presented. What counted were the result, and the means of obtaining them. In fact, the case read history backwards: once one knew the patient was cured, one came back to the order of treatment. While dramatising the consultation, this way of reporting the sequence of events blurred the initial two-step process of the consultation by letter, by focusing on experimentation of new remedies.

Moreover, symptoms and signs were absent from the narrative. The diagnosis was often summarised by an adjective attributed to the patient, as a sort of internal quality and not of an external entity attacking him/her. The patient was thus labelled 'epileptic' or 'melancholic'. Moreover, the signs and symptoms disappeared in the process: no examination of urine, no question of the complexion, and no description of what justifies the diagnosis. While consultations elaborated a treatment for a particular patient, through consecutive letters, case narratives dealt with case, and not with patients. The case was symptomatic of the disease, and more, of the treatment to apply. Gessner's answer to such narratives was uniform. Thus, in the margin of the case of a barber who suffered from colic, sent by an unknown correspondent who seemed to entertain many doubts about the

³⁵² Gessner to Holtzach, 31.01.1562, *Ep. Med.*, ff. 85v-86r.

good will of his patient and of his use of the treatment, (apparently consisting in having a small dog sitting on his belly for seven to eight days), he imperturbably noted: 'for colic'.³⁵³

This, however, was true for case narratives telling Gessner about the everyday medical life of his correspondents. But some cases were too exceptional to be integrated into a general disease. When Holtzsch reported the case of a baby girl born without an anus, and her post-mortem,³⁵⁴ Gessner immediately answered:

Women with the sexual meatus *closed* are quite frequent, but I have never read or heard of an anus so affected: that is why I will put this remarkable story you wrote with my memorabilia.³⁵⁵

In another letter, however, he returned to the case:

I have recently read in Cardano that many are born with an anus not perforated. Aristotle³⁵⁶ writes that there was a cow in Perinthus, in which weakened excrements of food were circulating through the bladder: when the anus was cut finally, it almost immediately closed up again, he says, and they could not triumph over the defect by cutting it again.³⁵⁷

Cases, news, were still elements of the epistolary dialogue: like the letters in which they were included, they called for answers. Gessner's answer was double. He first acknowledged the value of the case, because it was rare, by announcing he would put it among his memorabilia. He then tried to give the case a history: by searching his memory for hearsay and readings, and afterwards by sharing the result of his inquiry among

³⁵³ ZBZ MsS204b 148v.

³⁵⁴ ZBZ MsC50a 24. Holtzsch, considering the rarity of the case, goes into much more detail than is usual. Moreover, the baby girl has no history, as she died after three days, and therefore, the moment it began to exist in the narrative is the moment when Holtzsch saw her. It is thus impossible to determine whether the stress is put on the remedy because it is a new-born, or because the case would have anyway been written like that.

³⁵⁵ Gessner to Holtzsch, 15.01.1562, *Ep. Med.*, f. 86r.

³⁵⁶ Aristotle, *On the Generation of Animals*, 4 (Kessinger Publishing, 2004, p. 111: "There was a cow in Perinthus which passed fine matter, as if it were sifted, through the bladder, and when the anus was cut open it quickly closed up again nor could they succeed in keeping it open")

³⁵⁷ Gessner to Holtzsch, 15.04.1563, *Ep. Med.*, f. 86v.

authorities, Cardano and Aristotle. By looking for other experiences, he conferred on the rare case, but also most of the case narratives he came across, a “historical depth”,³⁵⁸ substantiated both by this anchorage of the particular in experience, and by the fact that Gessner never closed the case. The second letter dated to a year and a half after the first: a long time for a one-time event, but the time necessary to enclose it in a more general, historical dimension.

Conclusion

Beyond objects, letters circulated news: elements of the correspondents’ everyday life, bits of experience anchored in time as well as in space, in medical practice and in intimate illnesses, in botanical expeditions and in printers’ shops. These items of news, however, were not raw material, raw events. Processed through the filters and frameworks of the epistolary genre and material constraints, of medical and philosophical theories and scholarly habits, of the self of the correspondents and of their feelings for each other, events became stories, patients’ words turned into case narratives, the smell of a plant into a definition or an identification. News items were not just novelties: they were a personal view of events, observations, and facts. Letters were especially fitted to accommodate them, because they themselves bore both a strong individual character and the elements ruling a professional and scholarly practice. The transfer of this everyday life into letters, however, was not anodyne. It erased the particulars of a case, and especially its chronology,

³⁵⁸ See Laurent Pinon, « Conrad Gessner and the historical depth of Renaissance natural history », in *Historia, Empiricism and Erudition in Early modern Europe*, Gianna Pomata & Nancy Siraisi ed., Cambridge Mass., the MIT Press, 2005, pp. 241-267. Interestingly, Gessner had exactly the same reaction to the remedies and *experimenta* he received from his colleagues. Recipes were often accompanied by case narratives, or at least by a list of the possible fields of application. Gessner’s answers echoed his reaction to the baby-girl story. See for instance letter to Occo, 18.02.1565, *Ep. Med.*, f. 69v, when Gessner describes his reasons for not approving of a remedy, calls for experience, and adds a case narrative, used to illustrate his point.

while anchoring the story in historical and recent time. It also introduced in the realm of scholarly ‘food for thought’ elements hovering between the particular and the general. Just like the successful genres of *Observationes* and *Curationes*, Gessner’s letters invented new forms of writing and thinking about knowledge, and therefore new ways of defining what a physician, what a scholar was doing: opening, and reopening cases.

CHAPTER 5: EPISTOLARY QUESTIONS: BETWEEN GENERAL AND PARTICULARS.

Introduction

In Chapter 4, I have shown that correspondence was not only a space for the exchange of objects, but also of stories and facts. However, the status of these “matters of fact” in the elaboration of knowledge about nature or medicine was not unproblematic during the Renaissance. Ancient scepticism, religious controversies cohabited with a still-strong scholasticism and attempts at revising Aristotle.*

The problem was even more crucial in letters whose aim was to promote science and even to elaborate it, for the correspondents did not necessarily agree over the definition of knowledge. Letters were based on the assumption that letter writing should be adapted to the correspondent, to his need and his desires. Gessner, as we have seen, often scolded those who did not address his need to get something about medicine or nature in every letter. However, and contrarily to treatises, this same ability to adapt left also considerable leeway regarding the formalisation of knowledge and the sort of learning this learned conversation between absent friends was supposed to bring in. Because each letter was susceptible to be further circulated, it had to display its author’s erudition and legitimacy in

* Parts of this chapter have been presented to audiences at ESF Workshop, Nijmegen, 2005 and at Emphasis Seminar, London 2007.

the Republic of Letters. But, at the same time, letters had no definitive, final character: the conversation had to keep going. It was thus essential to elicit an answer from the correspondent; and although reciprocal gift-exchange worked quite well for those who believed in collecting facts, correspondents who were more interested in the general pursuit of philosophy could not be satisfied only with particulars. In this chapter, I argue that every letter had to negotiate these issues – both at an epistemic level: to redefine knowledge and the kind of status particulars and the general had in this knowledge, and at a social level: the expectations of the correspondent. I examine the different spaces of negotiation offered by letters.

The first section examines what kind of knowledge Gessner said he was seeking, and shows how he himself wavered between the higher status of philosophy and the practical utility of a collection of ‘matters of fact’.

The second section concentrates on how Gessner constructed his own way of inquiring about nature and how he constantly negotiated between questions traditionally used to display and structure knowledge, and matters of fact. In this chapter, I propose to consider the questions in their role of epistemological tools: they set up a framework against which medicine and natural history could be pursued by determining both the direction of the inquiries and the points to be taken into consideration. Besides the questions Gessner and his colleagues asked about nature, a large number of questions remained unasked. What were the questions these scholars asked? How and according to which traditions, or not, were they formulated? By removing traditional questions from the pedagogical display of knowledge and transforming them into an emanation of particular matters of fact, letters became not only a space for the display of knowledge but for an inquiry about nature or medicine. By a constant renegotiation of the questions, the epistolary dialogue made it possible to accommodate both the general and the particular,

through a redefinition of what the general was: not the research about general causes, but the elaboration of a general course of action, valid in most circumstances.

But the unity of the questions also focused the research on certain specific points: the third section examines briefly how the dialogue between general questions and particulars generated a collaborative quest for knowledge, based on the collection of inquiries about a definite question as much as on the elaboration of a collection of matters of fact about one object.

Section 1: To be or not to be a philosopher?

Letters were, as I have already said, a self-portrait. While they reflected the correspondent's interests, they also shaped the way in which he wanted to position himself in the Republic of Letters and among other physicians. Strangely, Gessner's letters did not fit the standards of Renaissance epistolography, and read very differently from those produced by contemporary scholars and even physicians like Johannes Crato or Pietrandrea Mattioli. Crato's published letters, for instance, often began with a quotation from the Ancients, then set out rhetorically the different points of doctrine or erudition their author wanted to share with his correspondents.³⁵⁹ The same applied to many of the published humanist epistles,³⁶⁰ and were certainly well suited to one of the strong inducements to write letters among Gessner's contemporaries: their usefulness in the display and demonstration of knowledge and virtuosity. Gessner's letters, like those of his correspondents and of any member of the Republic of Letters, were, at every moment of

³⁵⁹ See Johannes Crato, *Consiliorum et epistolarum medicinalium, ... liber*, Frankfurt, Wechel heirs, 1592-1595. Crato's letters are closer to the humanist epistles described by many scholars. See for instance, *La correspondance d'Erasmus et l'épistolographie humaniste*, Bruxelles, Université libre de Bruxelles, 1985. I will qualify this sort of letter, aiming at the display of knowledge, as philosophical epistles.

³⁶⁰ For more examples, see Chapter 7. The editors of the 1577 edition of Gessner's correspondence have attempted to 'refine' subtly the letters.

the correspondence, liable to be brought before the public. They were frequently printed in a controversial context, with, and sometimes without, the consent of their author,³⁶¹ and, even without supposing the possibility of an accidental opening before the letter reached its destination, they often were circulated further, among the immediate local acquaintances of their addressee or in his own correspondence network. Letters were thus written with two audiences in mind: their addressee, but also the whole community. Therefore, their author sought to prove, even in a private correspondence, his worthiness of being a member of the Republic of Letters: his learning, his honesty, his virtuosity. This was not, however, simply an issue of self-presentation. What was at stake here was also the epistemic value of the letter: a form given to knowledge. Gessner's letters were not, at least in an obvious way, blessed with such demonstrative powers.³⁶² They certainly, for most of them, did not fit the usual model of the "scientific paper" or of the "demonstrative display."³⁶³ Were they only an exchange of particulars? What kind of knowledge could such an 'informal form' create? How did Gessner accommodate the necessity of maintaining his status in the community with his lack of interest in what was still the highest kind of knowledge: philosophy, or the knowledge of the causes of things?

This discrepancy with the formal norms of the "philosophical epistle" apparently called for justification. Gessner thus answered a letter from Crato by congratulating him on the philosophical value of his letters:

³⁶¹ See for instance the letters published by Taddeo Duno in 1555 and 1592, about the use of *oxymel* in cases of pleurisy, first written privately and then printed.

³⁶² As we shall see in Chapter 7, Caspar Wolf had a hard time trying to justify that Gessner's correspondence belonged to the genre of Medical letters. And many historians felt compelled to excuse his awkwardness and stumbles. The informality of most of Gessner's letters contrasts with the careful presentation and organisation of others. As we have seen in Chapter 2, according to the correspondent and to the momentum of the discussion, words were pondered upon and copies were made.

³⁶³ The comparison of humanist letters with scientific journal articles has been drawn for instance by Vito R. Giustiniani, "La communication érudite: les lettres des humanistes et l'article moderne de revue", in *La correspondance d'Erasmus et l'épistolographie humaniste*, Université libre de Bruxelles, 1985, 109-133.

If only I was able to philosophise frequently with you, and to learn from the books you have published, or will publish, and from your very benevolent letters to me, the real causes of things, method and other things of that kind, which are beyond the reach of ordinary physicians. But I don't know why this happiness has been refused to me, and I am diverted and prevented from this so-to-speak acropolis of a more solid knowledge (*doctrina*) by my too many and troublesome duties. I have always hoped that I could get a glimpse of some prime universal knowledge (*cognitio*) both in philosophy and in medicine, as it is more excellent and more fecund than 'a knowledge that is born of parts and empirical' (τῶν κατὰ μέρος καὶ ἐμπειρικῶν γνώσεων) but when I was young, I had no preceptors, no associates in my studies, no other occasions to promote this desire of mine; and now that I am getting old, the infirmities of age hold me back, and the multitude of my occupations block me. That is why, as I began when I was young to pass my time in learning about parts (ἐν τοῖς μερικοῖς μάθον διατρίβειν), so I continue in my lucubrations to illustrate one by one what grows in nature (παντοῖα τῶν κατὰ φύσιν ὑπαρχόντων καθ' ἑκάστων), and to exercise in these fields; but the time I am giving to these matters, I am taking from the study of the 'general' (τοῖς καθόλου).³⁶⁴

Gessner's apologetic tone and his open flattery of his correspondent's philosophical virtuosity – as a correspondent and as an author – put the former in a lower station of learning and of life, although he was at the time (in 1564), an established, well-known and sought-after scholar. His post as an ordinary physician contrasted with Johannes Crato's courtly position. The “real causes of things; method and other such things of that kind”, the “acropolis of a more solid doctrine”, the “prime universal knowledge” of things occupied a higher level of knowledge than the empirical *gnosis* of parts, the study of parts and the publications emanating from this work on individual natural objects. Gessner had to plunge into his own biography to find an acceptable excuse, alongside with his usual recourse to the *topos* of the busy man. Lyrical recollections of his

³⁶⁴ Gessner to Crato, 24.04.1563, *Ep. Med.*, f. 3v.

frustrated desire to learn and practice philosophy thus came together with the assertion of his own limits and therefore his own expertise: particulars.³⁶⁵

However, Gessner's humility, in the face of his own lack of philosophical accomplishments, did not extend to scholars younger and less established than the imperial physician. Indeed, his tone had changed radically, a few months later, when he attempted to convince Adolf Occo to work empirically on a specific plant he wanted to call *Occonia*. He wrote harshly enough:

Indeed, even if you are great philosophers, and if you do not turn yourself easily towards particulars, it is nonetheless necessary to give something to your friends: and to accommodate *the General to the Particulars*, as there is no utility in the former *per se*, and a great utility in the latter.³⁶⁶

While it would be very easy to ascribe the address to Crato to mere flattery and the scolding of Occo to the power letters had to reflect the truth, I would argue that such an internal contradiction cannot be explained merely in those terms. Gessner did not have to be coherent in his letters. But such discrepancies also revealed the tensions he felt regarding the status of his own medical or naturalistic pursuits and that of philosophical knowledge.³⁶⁷

³⁶⁵ Here, one is confronted with one of the consequences of the *topos* of the busy man. Not only did it enhance Gessner's status and smoothen the epistolary exchange, but it also justified the fact that he had no time for being universal. As we shall see in this chapter, the question of universality was at the centre of Gessner's doubts about knowledge: there was no clear-cut distinction between the aspiration to attain the universal and the desire to focus on particulars.

³⁶⁶ Gessner to Occo, 03.04.1565, *Ep. Med.*, f. 73r.

³⁶⁷ That Gessner did not feel at ease with being a philosopher is also quite apparent from the care he displayed in handling the term whenever he had to introduce himself, and especially in the difficult matter of book-selling. To be a philosopher might have appeared as a decisive selling argument, and many of his colleagues and correspondents did not hesitate to call themselves philosophers in the title of their books (to give only two examples: Cardano and Gasser). However, Gessner, during his lifetime of publications, mentioned his philosophical activities only five times, and this with great caution. His 1544 edition of Martial's epigrams was prepared by "Conrad Gessner, physician and teacher of natural philosophy in Zurich college". In 1548, the *Pandectae* were prepared by Conrad Gessner from Zurich, physician and professor of philosophy. The third book of his *Historia Animalium*, published by Froschauer in 1555, was authored by

Gessner's ambivalent position regarding philosophy and general discourse manifested itself whenever a correspondent requested him to engage in such general discussions. Sometimes, he simply postponed answering the problem,³⁶⁸ but more often he hesitated between avoiding the discussion and answering a question, although he almost always did so apologetically. Thus, he reluctantly answered Adolf Occo on the virtues of theriac, and concluded:

See how ineptly I dispute these things, in the knowledge of which I have no training. But it is your fault, as you have challenged me on this ground. I know these things are beyond the comprehension of my intellect: and I leave these subjects to those more knowledgeable than me. But what I could say on these subjects *for the moment, on the spot and spontaneously*, I have said briefly.³⁶⁹

Gessner's caution and reluctance in handling abstract and general concepts seemed amply justified by the general context, both political and religious, which did not encourage the belief that truth could be reached through logic, research into primary causes and concepts. His letters are threaded with the undermining prospects of wars, plagues and other troubles, religious or not, with the knowledge of the instability of things, and with deep incertitude about future and even about present.³⁷⁰ Moreover, scepticism was more

"Conrad Gessner, from Zurich, physician and Professor of Philosophy in the School of Zurich" and his *De piscibus et aquatilibus omnibus libelli* published in 1556 by Andreas Gessner, was ascribed to "Conrad Gessner, Physician and interpreter of natural philosophy in the School of Zurich". In 1562, his letter to William Turner, listing the books he had produced, was published by Froschauer again with these titles "Conrad Gessner Interpreter of Philosophy and physician from Zurich" This low-key manner of stating the name of the Grossmünster School in Zurich and of qualifying the philosophical merits of his work – he was not a philosopher but someone who translated and commented – contrasts with the usual self-fashioning of contemporary authors. The general silence in every other publication, including most of his *Historia Animalium*, stands out against the frequency of the mention of his medical status (in better than half of his publications, especially in the latter part of his life).

³⁶⁸ See Gessner to Crato, 24.04.1563, "Considerationem de Ambra rejicio in aliquod ocium" *Ep. Med.*, f. 6r.

³⁶⁹ Gessner to Occo, 12.12.1564, *Ep. Med.*, f. 54v.

³⁷⁰ Gessner's allusions to these incertitudes, related to plague or to wars, are many. See for instance Gessner to Gasser, 07.06.1561, *Ep. Med.*, ff. 22v-23r.

and more present,³⁷¹ and Gessner, without being a sceptic himself, was like many of his contemporaries deeply troubled by questions of truth and certitude.³⁷² In his case this diffidence was also reinforced because he could almost entirely avoid the handling of concepts, except in his publications and in his letters. His position as a teacher in the Grossmünster, was not one that would have forced him to do so:

That is why, even if I teach philosophy in our school, but to young men, almost to children, and more often in some compendiums of books than from the well-springs of Aristotle, don't be surprised if I seem to be, or really am, rather ignorant (*rudior*) *about the general in philosophy and in the medical method*. But I congratulate you on being able to pursue *the most general*.³⁷³

³⁷¹ Richard H. Popkin, in *The history of scepticism from Savonarola to Bayle*, New York, OUP, 2003, gives a general overview of the evolution of sceptical ideas through the early modern period, of their relation with the Reform and Catholicism, and of the way it shaped the understanding of knowledge. See also Ian MacLean, *Logic, Signs and the Nature in the Renaissance*, Cambridge, Cambridge University Press, 2001, who argues against the thesis that scepticism was the motor of seventeenth-century new science. See also Brendan Dooley, *The Social History of Skepticism: Experience and Doubt in Early Modern Culture*, Baltimore, The Johns Hopkins University Press, 1999. Although dealing mostly with seventeenth century, Dooley underlines the importance of the spreading of news as a commodity in the elaboration of new methods for testing reliability of information.

³⁷² Gessner did not claim he was a sceptic, but he was close to Henri Estienne, one of the editors of Sextus Empiricus. Apparently, truth was for him a religious more than a philosophical concept, and therefore could hardly be applied to the study of nature. It was also a rhetorical weapon against adversaries, more than a concept in itself because it was a moral concept: "Loquamur de rebus ipsis, et contenti simus docere. Veritas ipsa per se vincet, idque majori adversariorum ignominia, nostra vero gloria, quam si conviciis et vanis ostentationibus cum illis certaremus. Hoc ex philosophia discere poteramus: sed multo magis religio quam profiteamur, idem nobis suadet ac persuadere debet." he wrote to Guilandinus (*Ep. Med.*, f. 140r). By contrast, Gessner's used the notion of certitude whenever he wanted to discuss or assert a natural particular: « Aquae theriacalis etiam nullam certam compositionem habeo: sed cum succis quibusdam, ut berberorum et calendulae, et vini destillati liquore: qui medius fluit et dulcior est, (non qui primus, aut ultimus) in balneo Mariae, aliquid thericae addo: et in cineribus destillari jubeo," he declared to Johannes Culmann on 25.01.1564 (*Ep. Med.*, f. 46v). Or, to the same Culmann: "Examinare enim in tanto morbo omnia multum diùque oportet, et experientiae ferè quàm rationi amplius tribuere. Tu si quid experiendo certius cognoveris, facias me certiore." (*Ep. Med.*, f. 46r).

³⁷³ Gessner to Crato, 24.04.1563, *Ep. Med.*, ff. 3v-4r.

Besides the regrets, or the self-denying attempts of the letter to Crato, remained a longing doubt that philosophy was not necessarily the best path towards knowledge, or, more exactly, that the knowledge provided by philosophy might well not be useful.

First of all, the philosophical project of a universal knowledge was shattered by the discovery of new species, new particulars, and the “overload of information.” Face-to-face with the idea that knowledge perhaps had no end, Gessner wavered, according to the time and the place. While he ventured to hope, in a letter to Leonhardt Fuchs, that one day, if everyone gave it a hand, “a colophon” would be added to the Great book of knowledge,³⁷⁴ he sounded less optimistic when writing to Joachim Camerarius:

The subject (the study of plants) is certainly infinite, and could be expanding perpetually, especially for someone who would not be content with genres and would also seek all species.³⁷⁵

Faced with these doubts, Gessner went for utility. Time was rare, he wrote to Adolf Occo, and therefore it was useless, because endless, to look for causes:

I have however to concede, so to speak *on the top of this*, that some of the effect of the flesh of viper, on the top of this, comes by an occult cause from its form, it remains to consider whether for this reason one will refrain from substituting in its place some other thing that produces the same effect, whether by form, or because of the matter and quality of its elements. As long as it produces the effect we want, it does not matter for which cause it happens.³⁷⁶

Gessner thus dismissed looking for manifest causes as a waste of time, the unspeakable sin of the busy and overworked scholar. However, it would be equally untrue to assume that he wished to circumscribe, in an ‘empirical’ way, knowledge to a collection of particulars. Although early modern natural history, and especially Gessner’s books, have

³⁷⁴ Gessner to Leonhardt Fuchs, 18.10.1556, *Ep. Med.*, f 137v, see Chapter 3.

³⁷⁵ “Res certe infinita est: et quae augeri perpetuo possit, praesertim si quis generibus non contentus species quoque omnes persequi velit.» Gessner to Joachim Camerarius, Collection Trew, published in Gernot Rath, “Die Briefe Konrad Gessner aus der Trewsche Sammlung”, (1951), p.159

³⁷⁶ Gessner to Occo 12.12.1564, *Ep. Med.*, f. 54v.

often been condemned for being a mere and gullible collection of facts, these facts were not only an object of exchange, but a subject to which the mind had to apply itself.³⁷⁷ Perhaps it is more obvious in letters, a place traditionally devoted to the expression of the self, that these particulars were perceived in a broader framework of theories and, more importantly, of possible questions. While the search for causes was useless, the collection of particulars was not an end in itself, but a source of wonder and wondering: both of astonishment and of endless questions and answers.

Section 2: Negotiating questions: causes and particular matters of fact

Addressing problems, asking questions

When preparing his *Historia stirpium*, in June 1564, Gessner wrote to Adolf Occo:

I would like you to consider whether camphor and amber correspond to the virtues the Arabs attributed to them, and what could be used as replacement for them; and of what genre they are, i.e. whether they belong *to the vegetable kingdom*, or come from the earth or the sea, or have another origin. Some erudite men judge that amber is some sort of marine fungus: and this opinion seems confirmed by the abundance of very small holes it has. Because if it were among the fungi, I would deal with them as well [in my book].³⁷⁸

Collecting plants and stories about them was obviously not enough for Gessner. He had also to consider the delimitation of the vegetable kingdom, how each plant or object

³⁷⁷ Although it may sound trivial, it is worth mentioning that Gessner did question matters of fact, because many people still have this idea of gullible sixteenth-century scholars who simply reported everything that came to their minds.

³⁷⁸ Gessner to Occo, 19.06.1564, *Ep. Med.*, f. 51v.

belonged to a species, and the problems raised by border-line products of nature.³⁷⁹ If asking these practical questions was necessary to his *lucubrationes*, his professional obligations elicited other, more theoretical questions: one had not only to do, but also to know things. Moreover, asking questions was also part of Gessner's professional skills, especially when experience could not help him, as was the case in the sight problems of his fellow physician Johannes Placotomus.³⁸⁰ The case was assuredly difficult, because adding to the myopia diagnosed quite easily by Gessner, strange manifestations of double vision also appeared, when the patient observed things from a distance, and disappeared when he closed one eye, or pressed his eyes with his hand. Interestingly, he admitted his struggle and his powerlessness. He had seen nothing of the sort, and found no mention of it in the Ancients. It had cost him a lot of research and plenty of time, as several marginal notes in his own medical books testify. He had consulted Jacques Dubois' *Methodus sex librorum Galeni in differentiis et causis morborum et symptomatum* ...³⁸¹ and probably other texts on eye problems, such as the third letter of the nineteenth book of Giovanni Manardi's *Epistolarum medicinalium libri XX*, or Galen's texts. However, he could not understand whence the problem came:

I cannot adequately give a name or a reason to this affliction [double vision]. Aristotle, Alexander of Aphrodisias, Cassius ask in their *Problemata*³⁸² what is the reason why drunk people

³⁷⁹ The questions Gessner raised in his correspondence are often linked to these border-line species, or to the frontier between medicine and belief, such as the problem of stones in medicine or remedies he qualified as superstitions.

³⁸⁰ The consultation Gessner wrote for him is one of the few Gessner bothered to have copied by one of his amanuenses, and to keep among his medical papers. See *Ep. Med.*, ff. 136v-137v and ZBZ MsC50a18.

³⁸¹ Jacques Dubois, *Methodus sex librorum Galeni in differentiis et causis morborum et symptomatum in tabellae sex ordine suo conjecta... De signis omnibus medicis...* Paris, Christian Wechel, 1539, 2o [ZBZ: Z Md A 29.2]. Gessner's annotations on page 79 explicitly referred to Johannes Placotomus' case, and mentioned the differences between his case and the signs noted by Dubois: "Jo Placotomus omnia duplicia vidit; [habet] utrumque f. oculo [ἀπειρών]: lucem non fert, etc."

³⁸² Aristotle, *Problemata*, III, 31. Alexander of Aphrodisias, *Super nonnullis Physicis quaestionibus Solutionum Liber*, Angelus Politianus (ed), Basel, 1520, § 123; I was not able to locate the problem in Cassius.

see double, and seem to agree on the fact that it happens because of the different alignment of the eye; for if one presses one eye with one's finger, so that the other eye becomes "higher", the objects seen are double, and similarly by touch, if someone moves a nut quickly between two crossed or intersecting fingers, because one of the fingers touches the top of the nut and the other the bottom, and they move in opposite directions, one seems to see two nuts. Is this what happens inside you, that a part of your eye, or a humor, or an optical nerve has been slightly moved out of its usual place? Or has the conjunction of optical nerves been disjointed by a humor or some other body? Because if, as I suspect, you are suffering in fact from two afflictions, it is likely that one has preceded the other, and the other has followed the first, but that both did not appear together. But why, when you press your eyes with your fingers, don't you see double? Is it because this prevents some spirit from dissipating? And it is not simply that the dissipation of spirits is the cause of double sight, or all those who are myopic would see double. And the dissipation can also happen continuously, it is then necessary, for the double vision to appear, that the continuity is broken and dissolved: so that the spirit in the right eye on the one hand and the one in the left eye on the other touch the same object together. Because if you press your eye with a finger, once things have appeared double, the hand can prevent the thing from appearing double any more. But someone specialising in the eyes could tell you better.³⁸³

Gessner's powerlessness did not prevent him from formulating questions and hypotheses regarding the causes of the affliction. Or, to phrase it differently, his reaction to this difficult, almost unsolvable case was to ask speculative questions about the causes of the disease, and to formulate hypotheses under the species of new questions.³⁸⁴

³⁸³ Gessner to Placotomus, 27.03.1557 *Ep. Med.*, f. 137r.

³⁸⁴ Although they may appear as rhetorical devices introducing new steps in the process of reasoning, I would argue that these questions were indeed speculative means to produce new steps and ideas.

Questioning traditions

Such a reaction seems hardly surprising.³⁸⁵ Gessner benefited from a whole tradition showing which questions to ask, and how to ask them. His questions about the causes of double vision did not come out of nowhere. His first reaction, when faced with this difficult case, was to go for books: those of Aristotle, of Alexander of Aphrodisias, of Cassius, books where similar questions were asked and answered. Renaissance books of *Problemata* or of *Quaestiones* were legion. Both genres came from a pedagogical background.

At university, *Quaestiones disputatae* were, several times a week, attended by the students.³⁸⁶ Those who taught at university, but also students having earned their Bachelor degree, answered publicly a question, by defending a thesis against others. When studying for the degree of Medical doctor, students presented a thesis, once more following the question and answer format. Gessner, like all his university-trained colleagues once defended his theses in Basle University about the following questions “I. *An Cerebrum sit principium sensus et motus, an cor?* II. *An qui crescent plurimum habeant calidi innati?* III. *An qualitates formae sint elementorum?*”³⁸⁷ Similarly, *Problemata* arose from a pedagogical relationship. These collections of causal questions, extracted from everyday experience and

³⁸⁵ However, few historians studying the history of medicine, of case narratives or of natural history have focused on the interrogative framework surrounding such writings. The interest in the literary technologies recently manifested has in fact turned the focus towards the way cases or experiments were told, but not towards questions. When they were taken into consideration, it was in a broad sense in order to demonstrate what the aim was of the physician's inquiry about nature and medicine.

³⁸⁶ On the *Quaestio Disputata* as a training for students, see Roger French, *Medicine before science. the rational and learned doctor from the Middle Ages to the Enlightenment*, Cambridge, Cambridge University Press, 2003, especially pp. 95-97 et 102-105, as well as Brian Lawn, *Rise and decline of the scholastic Quaestio disputata : with special emphasis on its use in the teaching of medicine and science*, Leiden, New York, E.J.Brill, 1993. For a study of disputations by students, see for instance Herbert S Matsen, “Students’ “Arts” Disputations at Bologna around 1500”, *Renaissance Quarterly*, 47 (1994), 533-555; and Katherine Elliot van Liere, “Humanism and Scholasticism in Sixteenth Century Academe: Five Student Orations from the University of Salamanca” *Renaissance Quarterly*, 53 (2000) 57-107

³⁸⁷ C.C. Schmiedel, *Vita Conradi Gesneri Tigurini Philosophi et medici summi*, in *Opera Botanica* (1753), p. VII.

commonly known phenomena, were, initially, a list of questions the master proposed to his students for their training. By the time Alexander of Aphrodisias published his own version of the Aristotelian genre, they had become questions asked by students to acquire authoritative information from their master, but the idea that questions could prompt a display of knowledge and train the mind of students remained. Being a learned, physician implied thus a familiarity with questions, as well as virtuosity in answering them.

Moreover, as demonstrated by Ann Blair, Renaissance scholars favoured such readings.³⁸⁸ The scholastic exercise was soon turned into a successful genre of medical and naturalist publications: the humanist project of rediscovering Ancient texts had put forward books of *Quaestiones* and *Problemata* inherited from Hippocrates, Aristotle, Galen, Alexander of Aphrodisias or Cassius which were constantly reedited along the 16th century.³⁸⁹ Gessner himself was part of this editorial success. In 1562, he produced a selection of *Quaestiones* by Cassius in Greek, together with a translation.³⁹⁰ Modern collections also belonged to his library. Among the books listed by Urs Leu feature Aloysius Trissinus' *Problematum medicinalium... libri III*, Jacob Schenk's *Philosophia naturalis disputationes*, or Andrea Turini's *Responsiones contra Mattheum Curtium de loco incidendae venae in morbo costali*.³⁹¹ He also

³⁸⁸ By contrast with Renaissance *Quaestiones medicae*, which remained relatively unexplored as one of the genre shaping medical knowledge as well as a way towards medical knowledge, the genre of *Problemata* has received more attention. See for instance Brian Lawn, *The Salernitan questions : an introduction to the history of Medieval and Renaissance problem literature*, Oxford, Clarendon Press, 1963; Nancy Siraisi, "The *Expositio Problematum Aristotelis* of Peter of Abano", *Isis*, 61(1970), pp. 321-339; Ann Blair, in "The *Problemata* as a Natural Philosophical Genre", in *Natural Particulars. Nature and the Disciplines in Renaissance Europe*, Anthony Grafton and Nancy Siraisi (eds), Cambridge (MA) and London The MIT Press, , 1999, pp. 171-204.

³⁸⁹ As far as I know, no definitive study of these genres has provided a count of the re-editions.

³⁹⁰ *Cassi iatrosophistae Naturales et medicinales quaestiones LXXXIII, circa hominis naturam et morbos aliquot*,Zurich, Jacob Gessner, 1562. Among Ancient books listed in Gessner's sources for the *Historia Animalium* featured Alexander of Aphrodisias' *Problemata*.

³⁹¹ Aloysius Trissinus, *Problematum medicinalium... libri III*, Basle, Jacob Parcus, 1547; Jacob Schegk, *Philosophia naturalis diputationes, et erotemata*, Tübingen, Ulricus Morhardus, 1538, and Andrea Turini, *Responsiones contra Mattheum Curtium de loco incidendae venae in morbo costali*, Bologna, JB Phaellus, 1543.

mentioned to Melchior Guilandinus the necessity of publishing his *Defensio XX problematum*, which was still in manuscript, although he could not find a printer in Zurich for it.³⁹² These were only some of the numerous publications under similar titles Gessner's contemporaries produced, thus promoting causal questions under various forms.³⁹³

This tradition determined quite strictly which questions could or could not be asked. While *Problemata* favoured questions arising from everyday and commonly known experience, the rules of the genre, as stated by Alexander of Aphrodisias,³⁹⁴ excluded questions whose answers were obvious, as well as those that were impossible to answer, because the causes were based on occult properties.³⁹⁵ While each of Gessner's contemporaries was alone with his own doubts on the status of knowledge, of the general and of particulars, they nonetheless shared his training in asking questions, and causal questions.

Asking and answering questions was thus integrated in Gessner's training, in his readings, and in his professional skills, in spite of all his criticisms on scholasticism. They represented the main discriminator between learned physicians and empiricists, a crucial difference at a moment when the competition on the medical marketplace was huge, and

³⁹² "Petis, ut Theonem tuum, Librum epistolarum, et Defensionem XX problematum quam nunc misisti, a Typographo aliquo, uno volumine, imprimi curem ; quod equidem libentissime faciam, si potero." *Ep. Med.*, f. 139v. This publication in Padua in 1558 was followed by several answers from the scientific community. See Paul Hessus, *Defensio XX problematum Melchioris Guilandini adversus quae Petr. Andreas Mattheolus ex centum scripsit*,.... *Adjecta est Petr. Andreae Matthaoli Adversus XX problemata Melchioris Guilandini disputatio*, Padua, apud M. Ulmum, 1562.

³⁹³ Traditionally, *problemata* began by "Cur", while *Quaestiones disputatae* stated a double thesis, in the form of a "Utrum... an" question. This changed over time, and early modern *problemata* accepted questions beginning with "an". See Brian Lawn, 1973 and Ann Blair, "Problemata...", 1999.

³⁹⁴ Alexander of Aphrodisias, *Super nonnullis Physicis Quaestionibus Solutionum liber*, trans. Angelus Politianus, Basle, 1520, sign Br-Biir. See Ann Blair, "Problemata...", 1999, pp. 176-177.

³⁹⁵ The question of the cause of the attractive power of magnet was excluded from the range of admissible questions because it had no answer. As we shall see later, this at least did not prevent Occo from questioning Gessner on the causes of attraction in general and in amber particularly. However, it may explain Gessner's flippant answer. See Brian Lawn, 1973.

when learned physicians were trying to protect their own share of market by regulating the access to the profession and by enforcing a strong hierarchy and important strictures to the fields accessible to other medical practitioners.³⁹⁶ Moreover, questions, like the exchange of stories, objects and facts became a feature of a successful epistolary exchange, and Gessner, in spite of his reluctance to tackle general questions about causes, felt obliged to answer them, in order both to prove his abilities as a learned physician and to ensure the continuity of the exchange.

However, this tradition of asking causal questions clashed with his statements against the research into general causes. How did Gessner accommodate this tradition and his doubts?

From questions on causes to questions on effects

Some of Gessner's correspondents seemed completely deaf to his complaints about the search for causes. So Adolf Occo kept asking and pestering him with questions on the causes of the attraction of poisons. Because epistolary etiquette prescribed that any question had to receive an answer, he had no choice but to reluctantly address the matter. In his letter dated 12 December 1564, he attempted an explanation:

Perhaps the vipers, if their effect is caused by their form, attract venom to them by a similitude of some substance, just as magnet attracts the iron. As Homer says, "*the same as always*". Or sulphur, which attracts by force of its hotness, even if not absolutely, but in this or that material. Indeed, it belongs to something hot to attract, it can be something similar, something different, or even something contrary: however, not everything is attracted by any hot thing. The amber attracts straw, other very small things, and dust of iron: but only if it has been rubbed first and

³⁹⁶ On the structure of the health system in Zurich, see Chapter 4 and especially Wehrli. As I have already said, Gessner was very much aware of the importance of these regulations and this market sharing, as he said in a letter to Holtzach (15.11.1560, *Ep. Med.*, f. 84r) that he did not take care of ocular diseases, so that the 'ophthalmologists' and empiricists would have something left to do.

made hot, so that it seems a subject of controversy and of ambiguity when it *is placed* among the things that attract only through their form or their hotness.³⁹⁷

Caught in one of his rare philosophical discussions, Gessner did not seem at ease. He thus used comparisons with other objects, such as magnet or *amber*,³⁹⁸ as limit-cases for the problem, but did not go into the thorough discussion about causes Occo was expecting. However, the latter did not accept this dismissal.

On 4 February 1565, Gessner came back reluctantly to the attractive power of certain substances, but centred his propositions on amber, i.e. on one of the substances he had, in his previous letter, quoted as an example. The discussion, from a problem about the causes of the attraction of theriac to the general problem of attraction, and then to the particular problem of the attraction of amber, created a context where one same phenomenon could be examined in different substances. However, the question of attraction could not, according to Gessner, be dealt with by questioning its causes. He first contested the exact formulation of one of Occo's assertions:

On the attractive power of certain substances, like amber, I have no time to argue with you any more. I will only say that you are wrong in saying that amber, when it has been rubbed, attracts more quickly and more easily than when it has not been rubbed. When it has not been rubbed, it does not attract at all. The rubbing and the hotness thus produced are necessary not only in the case of amber, but also of many other things which attract (or perhaps all those known to us, except for the magnet). You also, no doubt, know that a great number of the precious stones once rubbed attract like amber.³⁹⁹

He proceeded to examine another point. Occo had, apparently, argued that theriac attracted as such: not out of hotness, but out of a new quality resulting from the mixing of

³⁹⁷ Letter from Gessner to Occo, sd, *Ep. Med.*, f. 54v.

³⁹⁸ I translate *succinum* by amber. This concerns the mineral amber, not ambergris or gray amber, extracted from whales.

³⁹⁹ Gessner to Occo, 04.02.1565, *Ep Med.* f. 61v.

its ingredients, and which he called *kerasis*. Gessner disagreed with what he considered unduly shifting the meaning of the word:

For me, I say that there each and everything has a substantial form, from each of which only one such thing can be said: and this is not something *that comes later*, or results from the mixing of qualities, but something simple and primitive, and therefore celestial. And reciprocally, each and every thing has its own *kerasis* and natural temperature, made of the mixing of the quality of its elements, which is not a substantial quality. It is by means of *kerasis* that medicaments act, they should not be said to act by means of their whole substance. And in return, qualities can be mixed, without something *substantial* being born from them. But I am writing immediately, for the sake of exercise, even if I had once decided to abstain.⁴⁰⁰

What was at stake, here, was fundamental for medicine, especially for people who worked on the manufacture of new medicaments, as Gessner and Occo, the author of a pharmacopoeia, did.⁴⁰¹ The former still answered in the same terms of *kerasis* as his correspondent, but the question had changed from a general problem to a question on a particular: from the question of attraction to that of the reason why theriac attracted. Just a few months later, on 3 April 1565, the subject came up again in another letter: Occo wanted to know whether amber attracted straw through its hotness or through a specific quality. This time, the discussion did not focus on concepts, but on matters of fact. Gessner brought up several different materials illustrating the different kinds of attraction.

I think that, among the things that attract, some do by their hotness, a quality manifest to us; others by a specific quality, like the magnet, by some similitude in the substance: and that is why everything is not attracted by them, but only similar things: hence it is certain that the magnet attracts nothing but iron alone: it is very similar, but within the same type, more powerful: that is why it attracts, and is not attracted in return by it.⁴⁰²

⁴⁰⁰ Gessner to Occo, 04.02.1565, *Ep. Med.* ff. 61v-62r.

⁴⁰¹ One can also note how easily Gessner picked up again the reflexes of the scholastic disputation, and reminded his correspondent of the necessity of exactitude in his assertion (in the first sentence).

⁴⁰² Gessner to Occo, 03.04.1565, *Ep. Med.*, ff. 70r-v.

While the magnet came up merely as an example of attraction through the similitude of substance, amber attraction was examined much more thoroughly, by comparison with many other substances. Each time the discussion focused narrowly on the object, and on the observation of the effects of its specific powers of attraction.

But *amber* does not attract only one sort of thing, but all the most minuscule ones, and even iron and the magnet, but not before it has been rubbed first so that it gets hot; it seems that it is not through a similitude of substance and a specific force like the magnet, but through another means. *Or it seems necessary to oppose* things that attract through their hotness, and others that attract through their complete substance: just as, without doubts, theriac, because the pills are made of vipers, also has a specific force against poisons, not perhaps to attract them, but to expel them, just as theodamas [*sic*] pushes the iron back, and does not attract it like a magnet; but like most, if not all drugs, it resists venereal diseases by some obvious quality. What I know is that any hotness does not attract similarly: amber attracts when it is made hot by rubbing, but not by fire; this is perhaps because the latter closes its pores, while the former opens them.⁴⁰³

Here, it is through the exchange of letters that, little by little, Gessner managed to change the general question about causes into a question about one particular and its effects. He was thus able to answer on a causal ground, but one less theoretical, replacing notions of substance by the concept of quality – hotness, for instance, which he again divided according to the way in which it was produced, that is to the conditions in which the experiment was conducted.⁴⁰⁴ However, if the question could change, it was because, beyond the single, isolated ‘philosophical’ letter, the epistolary exchange was a dialogue, and Gessner could lead it in whichever direction he wished. The humanist assimilation of letters to dialogues conspired to confer on letters this aspect of a progressive discovery of knowledge. Their success had important consequences for the elaboration of knowledge.

⁴⁰³ Gessner to Occo, 03.04.1565, *Ep Med f.* 70v.

⁴⁰⁴ I do not know for certain that Gessner really conducted any experiment with amber. A curiosity, amber carried with it a large bundle of experience and common knowledge. It must be noted, however, that Gessner mentioned in the letter to Occo I will examine in the next section that he observed carefully a broken parcel of amber, and produced an interesting analysis of its origin.

The use of dialogue meant that exploring a subject was no longer done by means of looking for the truth produced by logical reasoning, but through the feeling of certitude inspired in the listener, and through the exchange of arguments rather than of logical propositions.⁴⁰⁵ My contention is that this change in the nature of knowledge, from logical truth to rhetorical certitude, or dialectical certitude, also happened through letters and deeply remodelled the way research about nature or medicine was done. Letter writing was not only a means of communication; it was a way of thinking about general issues alongside the usual scholastic methods of the disputation. Letters were not meant for eternity, as were treatises. Their pedagogical and playful dimension was crucial in the elaboration of knowledge, because it transformed the quest for knowledge from a pedagogical into an elaborative process.

Extracting questions from matters of fact

Left to himself, Gessner chose to extract his questions not from a general search for causes, but from facts. Thus, when he reported the death of one of his patients, a young pregnant woman, killed by the plague, he extracted from the case story two questions:

We recently bled a pregnant woman, seized by the plague, and about five weeks from the end of her pregnancy; and as a small tumour had appeared in her groin, quite a lot of blood was taken from her heel; she was well and had a good colour. The disease had arisen in her from contagion. We thought, however, that the foetus was already quite perfect, and that the danger if it was born before the time was small; that is why we gave her also a medicine, a little theriacal water with distilled vinegar and a bolus preparation, and once she had swallowed it she sweated moderately. This done, two days later, (I think) she gave birth to a living baby, almost perfect: but as from the beginning of her disease the internal heat, the headache, and the other symptoms got ever worse, on the third day she died. I think, in truth, that she was bled more than was

⁴⁰⁵ See Roger Deakins, « The Tudor Prose Dialogue: Genre and Anti-genre », *Studies in English Literature, 1500-1900*, 20 (1980), 5-23; Rudolf Agricola, *De Inventione Dialectica*, Louvain, Theodoricus Martinus, 1515; see Olivier Abiteboul, *La rhétorique des philosophes, Essai sur les relations épistolaires*, Paris, L'Harmattan, 2002.

necessary; I, myself, did not take part in the opening of the vein. Here, I am looking for your judgment, very erudite Platter, so that you may frankly report whether you would another time advise bleeding pregnant women in the last month of their pregnancy who had been infected by the plague, if they are young and sanguine, and equally whether, when the disease comes from contagion, you reckon one should abstain from bleeding, as I see some learned men think.⁴⁰⁶

Here, death and failure obliterated what could have caused Gessner pride and pleasure. Saving a premature child from the plague, and perhaps an ounce of satisfaction at being proved right in his reluctance to bleed such patients, could have been the highlights of the narrative. On the contrary the case history merely resulted in a double question addressed to Platter, on the use of bleeding a patient, according to his or her specific condition, and according to his or her illness. But these questions here had no immediate, actual use for the particular patient, nor could it be in the case of an acute disease due to the necessary time span between two letters. However, the story was not merely a tale. Instead, it asked for the induction of a general course of action from the specifics of the case. Admittedly the peculiar poignancy of the case and the fact that the phlebotomy had been carried out in Gessner's absence made it also politically necessary for him to get support. The case actually conjoined three potentially polemical features: the problem of phlebotomy as a treatment, the problem of bedside practice and joint consultations, and the problem of the professionalisation of medicine and rivalries between different sorts of practitioner, linked to the risk of prescribing phlebotomy or not, i.e. an act reserved for the surgeon. However, what resulted from the case narrative was not a polemic: instead of functioning as an *exemplum*, it was the basis for formulating a practical problem.

The questions Gessner asked in his letters were not always extracted from his everyday medical life. His contemplation of nature also introduced new questions, and

⁴⁰⁶ Gessner to Felix Platter, 06.11.1564, *Ep. Med.*, ff. 100r-v.

tentative answers. Thus, when he one day dropped a fragment of yellow amber, and broke it, he immediately reported the contents of his observations to his correspondents:

“Two days ago, as a piece of *amber* had fallen from my grasp and broken in two, I found within it chalcantum spreading, like rust, partly whitish, partly dark and reddish, and yellowish, etc; not where the amber was solid, but where it had been broken; and as the piece was still whole, I noticed the same spread in some of the holes of its surface before, and I had deduced from its taste very easily that it was chalcantum; with the same difference of colour, that distinguishes chalcantum from misy⁴⁰⁷ and copper sulphate.⁴⁰⁸

However, Gessner did not stop at the description, or the account of his observation. Instead, he insisted that the story was a new one, and one that caused wonder. He proceeded to explain the causes of his wonder:

I wanted to point this out to you as something new and wonderful. Indeed, I think that the presence of chalcantum was not accidental, as if perhaps this piece had been put together with some vitriol, at some point, but natural and that it was born from the substance of amber itself, just like rust is born from iron, not, however without any defect, surely by the alien humors which habitually is situated in holes and fissures; as there is perhaps no chalcantum born in the earth without some defect in the subterranean air, just as no rust appears without a defect in the iron.⁴⁰⁹

Here, Gessner entered into an explanatory movement: from the observation, he derived a cause and an origin for it. However, this cause did not lie so much in the inner properties of the amber, but in the agency of nature. What he was interested in here was not in determining why things were like that, or in ascribing an internal cause to this particular aggregation, but in how it had been produced. Moreover, this explanation remained, at first, at the level of the particular bit of amber Gessner had observed: there

⁴⁰⁷ A metal, reported by Pliny, *Historia Naturalis*, XXXIV, 114.

⁴⁰⁸ This chalcantum was a black dye.

⁴⁰⁹ Gessner to Occo, 18.02.1565, *Ep Med* f. 68v.

was no attempt to understand the hidden causes of such an aggregation, only the report that he attributed this aggregation to nature and not to man.

However, such analyses implied, apparently, further justification, and he proceeded to explain why he had reported this fact, and his hypotheses. Three reasons had compelled him to make these remarks. The first one was the admiration of nature.⁴¹⁰ The second one was the promotion of the knowledge of the nature and of the powers of amber and the last the understanding and the formulation of a hypothesis concerning its fossil origin.⁴¹¹ This excluded an interest in primary causes: understanding the nature and the virtues of amber did not imply looking into the causes of its properties. From a particular observation, Gessner deduced a general hypothesis about the origin of amber. Again, his sets of questions were extracted from facts, in an attempt to derive a general explanation or general principles of action from a particular case story or observation.

Gessner's way of accommodating the general to the particulars...

But while Gessner had extracted his questions from facts, he had not invented them: the problem of bloodletting in cases of infectious diseases, such as plague or pleurisy, was the theme of a number of publications during the same period.⁴¹² And amber, a source of

⁴¹⁰ The theological roots of natural history, according to which the study of Nature is the best way to praise the Creator, have been emphasised recently by Brian Olgivie, "Natural history, ethics and physico-theology" in *Historia. Empiricism and Erudition in Early modern Europe*, Gianna Pomata and Nancy Siraisi ed, Cambridge, MA, MIT Press, 2005. Also see Laurent Pinon, *Les livres de zoologie...* (2000), for a synthesis on the role of theology in natural history.

⁴¹¹ "Sed quorsum haec? Eo sane, ut admiremur naturam rerum: et succini cum chalcanto cognationem natura simul ac viribus nimirum intelligamus: et succinum omnino fossile quid esse, non supra terram nasci, aut ex arboribus defluere. Haec vellem te communicare cum aliquo rerum fossilium perito homine, qualem praecipue D. Peucerum hodie esse puto, (quem audio innumeras succini differentias habere), ut iudicium ejus audiremus.", Gessner to Occo, 18.02.1565, *Ep Med* f. 68v.

⁴¹² See for instance Matthaeus Curtius, *Quaestio de phlebotomia in pleuresi*, Venetiis: per J. Patavinum et V. de Ruffinellis, 1534, reedited under the title *De venae sectione quum in aliis affectionibus tum vel maxime in pleuritide liber*,

wonder, partly on account of its attractive powers, partly of its uncertain place in the realm of nature, was a usual object of research for early modern scholars. If Gessner mostly rejected the scholastic tradition of asking for causes, he nonetheless abided by a tradition of questions based on practical cases. So too, did most of the questions he submitted to his correspondents: whether arteriotomy was not better than phlebotomy in cases of plague, what antique plant could be identified with the actual *nux vomica* or *aspalathus*, and where did the acidity of springs come from. These questions thus proceeded from a double negotiation: between tradition and the accidents of life, between two correspondents with different interests. The first consequence was, it seems to me, to reduce greatly the possible questions. They could not be about causes, and they were generally related to practical needs or to traditional wonders. They were thus circumscribed: questions of identification, questions about phenomena, questions about virtues, etc. Thus, when he asked Caspar Wolf, who was studying medicine at Montpellier University, for precise information about snakes and salamanders in that region, Gessner proposed a defined set of questions:

I hear that where you are, in Provence or in Languedoc, and I have no doubt around Montpellier as well, one can find a genre of lizard, or *stellio*, or salamander, commonly called “un blandein”, perhaps from its charming (*blandus*) and slow walk, very venomous, with, in the middle of its back, spots like stars, which is sort of black on its sides, of the colour of vermillion in the middle of its back, and on its belly purple black. I ask you to inquire zealously about it, and if someone around has my book on oviparous quadrupeds, to compare it with the history of the salamander: because if it differs in appearance and colour from our salamander, please have it painted for me with its colours. Do the same if you find some snakes around, for there are only few kinds of snakes where we are. In warm and maritime locations, I have no doubt that there are various species. Inquire at least about the names, forms, and virtues or venom of each one, even the smallest.⁴¹³

Bologna, J.B Phaellus, 1539, or books by Jean de Gorris (1556), Andrea Turini (1545), Benedetto Vittorio (1536)

⁴¹³ Gessner to Wolf, the day after Easter 1557, *Ep. Med.*, f. 122v.

Questions asked by Gessner, here, were again extracted from experience and the absence of a fact: the report of a species he did not mention in his *Historia Animalium*, and its description. However, they seemed completely standardised: names, forms, virtues and venoms, the usual features of any entry in his books, be it for plants, remedies or animals, were all there. This standardisation is also apparent when one considers the questions he asked and answered in the *Epistolarum Medicinalium libri III*. Many concerned the identification of a plant or a remedy, its form and its virtues. For instance, one of Gessner's letters to Occo mainly consisted in a list of questions for Melchior Guilandinus:

Whenever you write to Doctor Guilandinus, a man of great learning and zeal, I would like you to ask his advice about the so-called *Cocallum*, that are used to catch fishes, from which and what sort of plant they seem to him to come, and whether he thinks they have a narcotic virtue. And similarly about what is commonly called *nux vomica*, from which plant and whether it is narcotic; I have not been able to determine yet about the *rosa hierichuntis* what the plant is like and its leaves, etc. But I think he knows...⁴¹⁴

Other questions addressed to Guilandinus followed, all about the identification of plants and of their virtues.

Gessner also asked about the use of a remedy: the circumstances and effect of the remedy are then stated in the answer, with examples or accounts of experiences. Two other kinds of question sounded trickier: questions about the *modus operandi* in certain sorts of case, or in order to obtain the distillation of a substance, for instance, and questions about the causes of physical phenomena, such as the acidity of some springs, or the nature of substances or diseases (whether one can liken plague to rabies, for instance). Apparently, Gessner tended to ask the first three categories of question (i.e. what to do with this?) and he sometimes vaguely tried to answer the last category (i.e. why is it like that?). What did

⁴¹⁴ Gessner to Occo, 22.01.1564, *Ep. Med.*, ff. 50v-51r.

not change was his propensity to answer all these questions by narratives of his experiments, or of his experience.

Such a limited number of questions, and their repetition from one plant to another, and one remedy to another, reflected Gessner's preoccupation with describing nature. However, the inquiry about nature was not only about describing it: it was about determining general principles of action, verified by experience. Indeed, the correspondent's value consisted in his expertise: both his specialty in one field and his wide experience, which enabled him to provide his correspondents with a variety of matters of fact, when confronted with a question about what to do in this or that case. Therefore, the tentative explanation of the fossil origin of *succinum* carried its importance from the fact that it is, in fact, a question, addressed to an expert on fossils, Caspar Peucer. Although Gessner here used Occo as a go-between, the process is the same as when he asked Platter for expert advice about bloodletting.

Because letters were a dialogue, determining a space for negotiation between tradition and real life, between the needs of each correspondent, their epistemic function was not limited to the production and the circulation of matters of fact. They permitted questions, and elicited answers, thus basing general knowledge on personal particulars. But this space for negotiation was not only one where knowledge was displayed. The movement of the dialogue created a dynamic path to knowledge: from one question to another, the scholars attached themselves to the difficult business of extracting knowledge out of a pure action of retrieval, and of promoting the idea of a knowledge to be constructed out of matters of fact, out of personal, intimate experience and not out of common sense, as the traditional *Problemata* were, or of Aristotelian logic.⁴¹⁵

⁴¹⁵ There is much to say about the relationship Gessner entertained both with reason and with *experientia* and *experimentum*. Although he systematically gave preference to experience as a criterion of the truth, he rarely used it alone, and always referred both to reason (logic) and experience. Thus he wrote to Adolf Occo

Section 3: Collaborative knowledge: joint inquiries and the dynamic elaboration of knowledge

This standardisation of the questions, in the context of the epistolary exchange, shaped the way in which nature could be explored by creating, through negotiation and dialogue, a common pool of questions over which members of the Republic of Letters agreed: extracted from personal experience, based on how things were, and on utility. What were the consequences of this relative unity for the kind of knowledge produced? From a space designed for the display of knowledge, letters became the space for an inquiry into nature.

Letters were a space for the exchange of ideas as well as of information, for early modern scholars abided by the ancient definition that the letter was a conversation with an absent friend, as we have seen in Chapter 2. But this friendship was one the Ancients would not have forsaken: one of intellectual exchange, with people worthy of them. Therefore, their letters sometimes obeyed the ancient model of the philosophical letter: they defended an idea, answered general questions, and demonstrated their author's learning and virtuosity.⁴¹⁶ Gessner himself used to draw on this whenever he was involved

(07.01.1565, *Ep. Med.*, ff. 59v-61r): "Ad experientiam provoco: ex qua tamen plerunque, nisi cum ratione observata confirmataque sit, certi nihil colligi scio". Moreover, the experience he was putting forward was more *experimentum* than *experientia*: he encouraged his correspondents to conduct *experimenta* on plants, in order to construct *experientia*, and often complained that his own *experientia* was feeble, as he had practically no opportunity to conduct experiments. (for instance "Ego solidi parum experiri possum: in tota enim hac peste, nunquam a principio vocatus sum, non sumpto prius remedio aut secta jam vena ab aegrotis.", Gessner to Funck, 19.11.1564, *Ep. Med.*, f. 95r). On these questions, see Peter Dear "The Meanings of Experience", in Katharine Park and Lorraine Daston.(eds), *Early Modern Science*, Cambridge, Cambridge University Press, 2006, pp.108-130 and Brian Ogilvie, *The science of describing*, Introduction, pp.17-21.

⁴¹⁶ It is interesting to note that usually, these letters were the ones to survive. Their authors took greater care of them – Gessner had many of these philosophical, or eloquent letters copied, although he was usually less careful with letters carrying information. A number of the letters surviving in ZBZ MsC50a were these

in a controversy⁴¹⁷ or had to state a divergent opinion from his correspondent. His last years were largely devoted, as I have stated, to botanical research. But, during the same period, he also conducted numerous experiments with a view to developing an *oxymel*. In his letters, he constantly narrated the cures this medicine produced and sent his recipe to colleagues so as to induce them in turn to experiment. He supported their endeavours with numerous letters pleading for the use of the *oxymel*, in a solid, constructed argument.⁴¹⁸ Thus, in a letter to Jean Bauhin, he defended his *oxymel* against Guillaume Rondelet's criticisms. However, even before answering the criticisms, he stated:

Concerning my oxymel, I have no doubt that it can be improved: and this is why I am consulting an erudite man such as you.⁴¹⁹

Jean Bauhin was the usual intermediary Gessner used in his correspondence with France, and especially with Guillaume Rondelet.⁴²⁰ His role here, however, was not only to ensure that the letter would reach his addressee: he was included in the consultation, and his advice was solicited.

demonstrative letters, copied by Gessner or a student, and often included a postscript containing information, thus separating the official –and often officious – part of the letter from the matter-of-fact, informative part. See, as quoted in Chapter 2, Crato to Zwinger, quoted in Frank Hieronymus, *Theophrast und Galen – Celsus und Paracelsus*, 2005, 1379-1381.

⁴¹⁷ Perhaps the most famous instance is Gessner's controversy with Pietrandrea Mattioli over the identification of the *aconitum primum*, that elicited exchanges of correspondence at various levels: between Gessner and Mattioli, between Gessner and members of the community appointed to the role of referee, between Gessner and go-between who negotiated for him, or between Gessner and allies. See Candice Delisle, "The Letter: Private Text or Public Place? The Mattioli-Gessner Controversy about the *aconitum primum*" *Gesnerus*, 61, (2004) 161-176.

⁴¹⁸ He intended to publish his recipe, as he told Adolf Occo on 19.06.1564 *Ep. Med.*, f. 51v. Wolf added a compilation of Gessner's papers about the *oxymel* to the *Ep. Med.* collection in 1577.

⁴¹⁹ "Quod oxymeli meum attinet, non dubito quaedam in eo meliora fieri posse: atque eam ob causam vos eruditos consulo" Gessner to Jean Bauhin ZBZ MsF38.338.

⁴²⁰ In ZBZ remains Ms S104 .201, a copy of a letter from Rondelet to Gessner; with annotations stating it was transmitted by Bauhin.

Asking for the advice and opinion of one's colleagues was a way to test one's own ideas, and Gessner largely used it. Such expositions were a game he and his contemporaries liked to play: Thomas Erastus sent to several colleagues, Gessner included, his *Propositions about plague*, adopting an epistolary form both for the *Propositions* themselves and for the covering letter he added. His letters were then circulated throughout the network, eliciting epistolary answers from many colleagues.⁴²¹ Similarly, Gessner, Crato, Gasser, Stengel and Funck were collectively shocked by and discussed at some length Alexander a Suchten's *Propositions*, and wrote to Poland to communicate their disapproval.⁴²² The scholar from Zurich often sent, on a separate leaf, a letter retracing his point of view on a specific subject, hoping to get comments and answers to his questions, and to put the epistolary dialogue to use in creating knowledge. To reach knowledge was thus a collective process, both at a collaborative level, because everyone was supposed to contribute towards obtaining information, and at a consensual level, where the sanction of the community sealed the approval of a proposition.

Sometimes, however, "proposition letters" belonged to a larger kind of collaboration, as did a letter addressed to Corzelius, answering a request about the causes of thermal and medicinal springs:

I will hand over our pamphlets 'On thermal waters from Germany and Switzerland', first published in Venice,⁴²³ augmented and corrected, as soon as possible, to some German printer. In this new edition, I will zealously inquire as to the method by which one can also understand the composition of waters; but for now, in order to partly satisfy your request (and I believe I

⁴²¹ ZBZ MsZVII 119. The letters were published in Thomas Erastus, *Disputationum & epistolarum medicinalium volumen*, Zurich, Johannes Wolf and Froschauer, 1595.

⁴²² See Gessner to Crato, dated 16.08.1561, *Ep. Med.*, f. 2r and to Gasser, 19.03.1564, *Ep. Med.*, f. 35r.

⁴²³ *De Balneis omnia quae extant apud Graecos, Latinos et Arabas*, Venice, Junta, 1553.

have several things that either were perhaps not [unknown] to others, or that an intelligent physician would easily have found), I will explain a few ideas to you, as they came to my mind.⁴²⁴

A list of thirty propositions followed, stating Gessner's ideas about the causes of sparkling waters, the use of waters in cooking, the distillation of thermal waters, the reasons why these thermal waters were hot, cold, or acid, etc. He then concluded:

Here you have, dear Corzelius, what I would write at this time to Your Excellence as an examination of medicinal springs, not in order to teach you anything; but as an exercise for myself. It comes from my own intelligence and my own head, I have not borrowed anything from anyone else's books, except perhaps some things exposed to us by Solenander and his very erudite book on medicinal springs.⁴²⁵

Letters were thus a place where Gessner trained his mind and his pen in setting out clearly his ideas, new and old, in order to get the advice and opinion of his colleagues. They were the objects of discussions in the whole network. This letter apparently circulated far beyond Corzelius, at the instigation of its author himself. Its draft, kept in Zurich, bears the mention "item Henrico Munziger", "the same to Heinrich Munziger," indicating that it had been copied at least twice, and sent. Only the name and the part of the letter answering specifically to the correspondent's letter changed. We have no date for this letter. However, in 1561-1563, Gessner sent a number of letters to several correspondents mentioning his intention to produce an augmented version of his pamphlet about springs, asking for more facts. However, these letters of solicitation also spread his opinion on waters, and especially

⁴²⁴ "De Thermis Germaniae et Helvetiae libellos nostros, Venetiis prius so[lut]os, cum primum licebit, auctos atque recognitos typographo alicui Germa[nico] tradam; in illis qua ratione et temperatura aquarum [comprehendi] queat, diligentius investigabo; in praesentia; ut petitioni tuae satisfaciam aliqua ex parte, (et non nihil habere me puto quod vel ab aliis forte non sint [ignota], vel ingeniosus quivis medicus facile invenerit) pauca et ita ut inciderint, tibi exponam", Draft of a letter from Gessner to Corzelius, ZBZ MsC50a70.

⁴²⁵ "Haec habetis, clarissime Corzeli, quae hoc tempore De fontibus medicatis examinare ad Exc[ellentiam] tuam scriberim, non te quidem docendi gratia, sed meipsum exercendi; ex meo fere ingenio et captu, nihil ex aliorum libris mutuatus, prae pauca quaedam Solenandri nobis exposita, cujus liber pereruditus De fontibus medicatis", draft of a letter from Gessner to Corzelius, ZBZ C50a70. The book by Solenander is presumably Reiner Solenander, *De caloris fontium medicatorum causa, eorumque temperatione libri duo ...* (Lyons, 1558).

on the reason for acidic waters. Thus he wrote to Culmann, asking him to read, then forward a paper about the acidity of succinum and of waters to the apothecary of Esslingen, Volmar.⁴²⁶ He also suggested his correspondents that they conduct similar inquiries. To the same Johannes Culmann, for instance, he wrote:

I ask you not to stop inquiring into the cause of the acidity of waters: until finally you are able to utter this wonderful philosophical cry: *eureka, eureka*.⁴²⁷

And he submitted to Adolf Occo a hypothesis on the same subject: acidity was communicated to water by chalcantum or some relative of this metal.⁴²⁸

Philosophical enquiries were thus everybody's business, in spite of the reservations Gessner manifested towards the discipline. These collective inquiries were frequent. For instance, he repeated his question to Platter about the use of bloodletting in case of plague to several correspondents. Their answers were collated and pasted in his *Thesaurus Medicinae practicae*, under the heading *Pleuritis*.⁴²⁹ The epistolary dialogue thus led to another dialogue, between the general and particulars. While Gessner extracted questions from particulars, these same questions reverberated in the form of inquiries in the network, in order to produce new facts.

⁴²⁶ Gessner to Culmann 25.06.1563, *Ep. Med.*, f. 45r.

⁴²⁷ "Fontium aciditatis causam inquirere ne desinas rogo: donec tandem pulcherrimum illud philosophicum exclamare tibi liceat: *εὕρηκα εὕρηκα*", Gessner to Culmann (21.01.1564), *Ep. Med.*, f. 45v. Apparently, the book was not reedited.

⁴²⁸ Gessner to Occo, 28.09.1564, *Ep. Med.*, f. 77v. The explanation of Gessner's hypothesis can be found in an experiment he conducted, while tasting a bit of amber, as he explained to Johannes Culmann: "His diebus dum succinum lingo, (magnam enim ejus glebam habeo) aciditatem manifestam percepi lingua lambendo: et circa rimas videbatur pulvisculus quidam subluteus, chalcanti ferè sapore, sed mitiore et acidulo, insidere. Album aliquoties mandendo gustare volui, et prae caeteris aciditatis aliquid in eo semper deprehendi. Est autem electrum sive succinum, ut inter eruditos jam constat, bitumini cognatum: et in bituminis aut gagatis glebis quibusdam, acidum quid et chalcanti sapore efflorescit. Audio autem gagates multos inveniri in Vuirtembergensi tractu. Quaerendum igitur an ab his etiam aciditas aquis nonnullis concilietur. Qua de re ut omni diligentia inquiras cupio." (Gessner to Culmann, 25.06.1563, *Ep. Med.*, ff. 45r-v.)

⁴²⁹ MsS204a, ff. 39r-40v.

Admittedly, these questions were not new, but anchored in medical philosophical tradition. But their status had changed. In contrast to the *Problemata*, which, according to Ann Blair, were “not designed to generate new ‘scientific’ or certain knowledge – they produce neither new principles nor new observations”,⁴³⁰ the questions exchanged by Gessner and his correspondents aimed at producing new particulars, new facts, and therefore, new knowledge.

The epistolary dialogue thus functioned at two levels. Firstly, it worked as an exchange of views between two individuals, and as a collaboration between these individuals towards creating or circulating information. But it also formalised knowledge, exactly as the philosophical dialogue did, and circulated ideas in the network, in order to get, according to circumstances, approval or support from the community. Early modern knowledge was thus the result of a doubly dynamic process: of the collective endeavour to exchange information, and of the collective consideration of problems and questions related to matters of fact. Letters were an ideal medium for such tentative knowledge: they were easily circulated and reproduced. Many of the letters now surviving were drafts or copies.⁴³¹ This easy reproduction had several consequences: first of all, it made any proposition the subject of a consensus from the community. Moreover, it shaped and normalised the inquiry into nature or medicine by circulating these examples of research to the whole Republic of Letters. Such letters assuredly received an extended circulation, and easily served not only as a sample of individual progress in the quest for knowledge, but as

⁴³⁰ Ann Blair, “Problemata as a Natural Philosophical Genre”, 1995, p. 175.

⁴³¹ See for instance how Caspar Wolf constructed his publication of Gessner’s *Physicarum Meditationum ... Libri V*. Some letters, with annotations in italics, are included in the collection published by Wolf, and state what kind of discussion Gessner and his colleagues had on philosophical matters. For instance, on f. 235r., the mention “Quod anima per se moveatur. Argumenta viri cujusdam eruditi ad Gesnerum” is followed by an extract of a letter from one of Gessner’s correspondents and, in italics, by several remarks by Gessner.

exempla of the way one should inquire into nature, asking questions and answering them, seeking the sanction of the community and comparing ideas.⁴³²

Conclusion

In the confused times of the Renaissance, each scholar had to come to terms with his own doubts about what truth and knowledge were, and to find a way to address them. Letters, because they were a crossroads of long-lived traditions, between private conversation with a friend, mirror of the self, training for the student, exchange of news and public display of knowledge, offered Gessner and his contemporaries an ideal space for negotiating these doubts with themselves and in the dialogue with others. Therefore, they shaped the way knowledge became what emerged from new questions, based on the pondering of how things worked, rather than on why they were like that, on practical utility and on the personal, intimate experience of matters of fact. By associating matters of fact with general questions, by making each particular a source and a guarantee of the general, they avoided to leave face-to-face *historia* and philosophy. Moreover, because each letter was part of an ongoing conversation, letters, doubled the formalisation of knowledge with a process towards this knowledge. Knowledge was thus both tentative and collaborative: it was based on the reaching of a double consensus, between the correspondents over the question to be asked, and within the community, on the sort of answer to give to questions. Between particulars and the general, between questions and answers, between doubts and certitude,

⁴³² As reported by Peter Walmsley: "Dispute and Conversation: Probability and the rhetoric of natural philosophy in Locke's essay." *Journal of the history of ideas*, 54, (1993), 381-394, but on a smaller scale, this way of launching questions on matters of fact in the correspondence network can be compared with the habit Robert Boyle had of circulating lists of questions and experiments to be conducted (also see Michael Hunter, "Robert Boyle and the early Royal Society: a reciprocal exchange in the making of Baconian science," *The British Journal for the History of Science* 40 (2007), 1-23). In Gessner's case, the private dimension changes the stakes, but the standardisation of questions and their collective dimension, as well as the expected result can be compared to this.

letters made knowledge tentative, the result of an endless dialogue between *philosophia* and *historia*.

CHAPTER 6: BUILDING KNOWLEDGE

Introduction

In the preceding chapters, I have studied letters within the space of the epistolary dialogue, and its implication for the community.* On the one hand, scholars exchanged, in their letters, not merely discussions about ideas, but also matters of fact. On the other hand, the epistolary dialogue made it possible for each correspondent to redefine his own interest in particulars or in the general, and to expect his correspondents to feed this interest.

However, the life of letters did not end with the epistolary dialogue. They were kept, re-read, dismembered and digested, printed in part or in whole in Gessner's publications. In this chapter and the next, I will thus consider the afterlife of letters, once they were taken out of this original space. How did letters become the very matter of knowledge? By which means, through which processes were letters incorporated in the body of knowledge? And how did these processes define what knowledge was, for Gessner and his correspondents?

* Parts of this chapter have been presented to audiences at the Colloquium SFDES, 2004 and at the Emphasis Seminar, London 2007

Before they even were the medium of epistolary communication, letters were objects.⁴³³ As we have demonstrated, their production made them a complex object, and their very aspect was often far away from the usual sheet of paper we are used to conceive. Although the pioneering works of Ann Blair and Anthony Grafton have underlined the importance of material practices and show how humanist practices could influence scientific practices, letters have somehow failed to elicit a similar interest. In this chapter, we will focus on Gessner's handling of these letters, from his reading to his cutting and pasting, and from this home-surgery to their publication in treatises, in order to address the problem of how matters of fact were dealt with, practically, and how this handling of particulars shaped the understanding of what the general was.

The first section presents the material practices associated with the treatment of letters. It explains how what was at stake in the process of reading, cutting and pasting a letter was the creation of an isolated, individual entity that constituted a matter of fact, that could be relocated to various places: collections, manuscript texts on the model of commonplace books, manuscript for treatises. This process, which destroyed the letters but allowed for almost endless relocation of their individual contents had important consequences for the conception of the matters of fact, and choosing which letters he would destroy was one of Gessner's most important tasks. This made knowledge very random, a knowledge made of spur-of-the-moment reading choices.

Once the relocation took place, the afterlife of letters began. Accumulating matters of fact, pasting them in various locations – manuscript books, printed books, his own publications and paintings, for instance, Gessner constructed a comparative knowledge

⁴³³ See for instance Ann Blair and Anthony Grafton, "Reassessing humanism and science" *Journal of the History of Ideas*, 53 (1992), pp. 535-540; Ann Blair, "Note-Taking as an Art of Transmission" in *Critical Inquiry*, 31(2004), pp. 85-107; "Reading Strategies for Coping with Information Overload ca. 1550-1700" in *Journal of the History of Ideas*, 64 (2003), pp. 11-28.

based on the accumulation of a variety of “nuggets of experience,”⁴³⁴ on which Gessner could rely when constructing his own knowledge of disease or of nature. If his knowledge was the result of a sharing of information, he also shared this knowledge. The last section addresses the consequences of printing: because it reduces three-dimensional objects to texts and images, the epistemic status of printed fragments was even more problematic. The letters in the *Historia Animalium* show how the printing of these matters of fact deeply changed their authoritative value and put at stake the trust and the validity of the testimony.

Section 1: Fragmenting letters, slicing up experience

An ocean of papers

After the publication of the *Bibliotheca universalis*, Gessner received letters almost every day of his life, often covering several points each. Moreover, these letters were not just sheets of paper; they were parcels, containing a multitude of objects, of varied forms, dimensions, and natures. They enclosed printed and manuscript books, recipes, notes, lists of plants, but also the plants themselves, natural samples of various origins, sometimes a flask of medicine, money, *antiquaria*... Under this huge flood of objects and information, Gessner sometimes felt he was drowning: the topos of the busy man was not merely a *topos*.

He was not the only one to understand the overload of information as a problem. All over Europe, scholars confronted what Charles Rosenberg calls an “information explosion”:⁴³⁵ textual production was expanding dramatically, with books or manuscript letters circulating through various paths – correspondence networks, bookseller’s mail –

⁴³⁴ Lorraine Daston, “Baconian facts, academic civility and the prehistory of objectivity.” *Annals of Scholarship*, 8 (1991), 337-363

⁴³⁵ In Rosenberg, introduction to “Early modern information overload”, *JHI*, vol. 64. 1 (Jan 2003).

while the number of possible sources of information was infinitely increased with the rediscovery of Ancient texts and of their inadequacies, and the finding of new animals and plants in remote and little known areas of the world. Like many of his contemporaries, Gessner thus had to “cope”: to find his own personal strategies to handle this information, and to construct his own tools, to shape it as he wanted.

The task, within the epistolary dialogue, remained relatively simple. Gessner, as we have demonstrated in Chapter 2, read, annotated and answered each topic simultaneously or successively, following the order of his correspondent’s letter. However, how to treat and prepare the received information for further use was slightly more of a problem. He repeatedly complained that he lost his way among his papers, and could not find anything any more:

This rare remedy to apply to the skull, which I had promised to you alone of all the Emperor’s physicians, when I had received it from Cardano, very erudite Holtzach, I cannot find: it must be hidden I don’t know where among my myriads of papers and so to speak Sibylline leaves; I have looked for it long and diligently, but in vain; as soon as I have found it, be sure you will receive it.⁴³⁶

To the Ocean of knowledge in which Gessner often felt lost, as we have seen in Chapter 5, another ocean echoed: an Ocean of papers. Handling, in a very material sense, the amount of papers, books and objects generated by his everyday practice as a physician, by his own research on nature and by the correspondence network⁴³⁷ was, as we shall see, a

⁴³⁶ Gessner to Holtzach, dated 2nd April (year unknown), *Ep. Med.*, f. 86v.

⁴³⁷ I am deliberately placing on the same level the information generated by the correspondence network and the material Gessner obtained by himself. A legitimate distinction between both can be made, as they do not create the same kind of experience, as Brian Ogilvie demonstrated. However, Gessner and his correspondents formalised their experience into circulable matters of fact, as I have demonstrated in Chapter 4; moreover, as I will show, they soon appropriated the papers and objects they received, through their incorporation in their collections and in their books. It thus seems to be both heuristically more efficient and epistemologically sounder to try and assimilate the results of Gessner’s experience and the reports of others. I think one of the

problem and a challenge to which Gessner had no other choice than to rise. It could even put at risk⁴³⁸ the rules of exchange in the correspondence network. For instance, he refused to invest time in searching for a recipe of an *Electuary* Adolf Occo had asked for:

I think our Funck has the recipe for the electuary of Lupus, and I hardly think one can find it in my *Euonymus*.⁴³⁹ If Funck has not sent it, I will ask the apothecary, even if I know I have it somewhere in the house, but in the middle of such a multitude of papers on plague, I would waste several hours trying to find it.⁴⁴⁰

If the quantity was a problem, the variety of the objects to be kept and put to further use had to be taken into consideration as well. And when Gessner boasted to Didymus Obrecht about the number of his earthly possessions:

If only you were able to see me and my garden, as well as *myriad* kinds of metal, stone, gem, and animal, innumerable pictures and the fifteen windows on which all the species of marine, fluvial and lacustrine fish are very elegantly depicted on glass, etc, as well as several things that are useful for constructing our art.⁴⁴¹

He carefully separated them by type and by their back: living plants, sample collections, pictures –on paper or on glass⁴⁴² - but insisted on their enormous number. Ordering these objects was not just a taxonomic problem: it was also a spatial issue.⁴⁴³

most important steps Gessner took in order to deal with the variety of the information he received and created was to homogenise it in reducing it to two-dimensional objects – texts and pictures.

⁴³⁸ Moderately, however, as the simple fact of being overloaded with information established him as one of the great scholars of his time.

⁴³⁹ The *Thesaurus Euonymi Philatri, De remediis secretis* (Zurich, Andreas Gessner and Rudolfus Wuyssenbachius, 1552) was a collection of recipes and one of the most successful publications of Gessner.

⁴⁴⁰ Gessner to Occo, 18.02.1565, *Ep. Med.*, f. 68r.

⁴⁴¹ Gessner to Obrecht, 18.03.1560, *Ep. Med.*, f. 115r

⁴⁴² A reproduction of the watercolors drawn for these windows can be found in Braun, pp.140-141

⁴⁴³ As Daniel Rosenberg underlined, talking about information can be anachronistic as it blurs the boundaries between different categories of experience – objects, books, ideas, knowledge, species. This appears in the way Gessner fragmented his letters into elements of different nature, but, as we shall see, through these very material practices Gessner managed to reach some homogeneity.

In Gessner's house in Zurich, at what is now 21, Frankengasse,⁴⁴⁴ handling letters first of all resembled a dismemberment: papers, stones, books, plants and their seeds, pictures, coins, etc were separated physically from their initial packaging and went their own way, according to their formal nature: plants and seeds were planted in his botanical garden, books included on the shelves of his library. It is a picture of this fragmentation Josias Simler offered to the readers of his *Vita Conradi Gesneri*:

Indeed, his house was full of things of this kind, he had either the corpse or the coloured pictures, elegantly painted from nature, of almost all the foreign animals; he grew many plants yet unknown in our regions in the little gardens he had established, and he had even more plants dried and hidden in his coffer; he also collected a treasure of gems, metals and fossils that should not be lightly dismissed.⁴⁴⁵

The gardens, the library, the museum and its coffer were thus repositories of different, specialised sorts of objects of nature. This specialisation was in no way exceptional: other naturalists – Aldrovandi, for instance – as well as the famous picture of Ferrante Imperato's museum offered a similar repartition of objects: books on their shelves, on one side, objects on the other wall, and, in the middle, a working table.⁴⁴⁶ However, these objects, as we have seen in Chapter 3, often belonged to the packages

⁴⁴⁴ According to Rudolf Steiger, «Erschliessung des Conrad-Gessner-Materials der Zentralbibliothek Zürich», *Gesnerus*, 25 (1968), 29-64.

⁴⁴⁵ "Erat enim domus ejus rebus hujusmodi referta, habebat omnium fere peregrinorum animalium vel cadavera, vel effigies coloribus eleganter ad vivum expressas: plantas autem plurimas et nostris regionibus ante ignotas alebat in sitis hortulis, plures siccitas in suis thecis reconditas habebat: collegit quotque gemmarum, metallorum, et rerum fossilium non contemnendum thesaurum. Haec autem universa non sibi tantum recondita servabat, sed quicumque rerum naturae studiosi illum accederent, his libentissime singula demonstrabat, et erudite ac suaviter de eorum natura et viribus disserebat," Simler, *Vita Conradi Gesneri*, f17r-v]. Strangely, Gessner's collections were not on display in his study: he showed them only to those who were *studiosi rerum naturae*. This means that Gessner's study was not a cabinet of curiosity: keeping things extracted from his correspondence belonged to his work as a natural historian, and not to the mere desire to display.

⁴⁴⁶ Imperato gave a famous picture in his *Dell'istoria Naturale* (Venice, 1599). For a complete and detailed analysis of the setting up of an early modern museum, see Paula Findlen, *Possessing Nature*, chapter 1 and Laurent Pinon. The place of pictures in such museums remains however unknown.

letters carried. What had been, initially, one single body of discourse, the book and the comments on the book, the stone or the plant and the observation made by the correspondent, was thus fragmented and relocated by form, and not by theme. The first step in handling the information contained in the letter consisted in separating the discourse and the object, very materially, thus robbing of its sense what was often the body of the letter – the discourse on material exchange. This helped to emphasise even more what stood fully out by itself: a book, a stone, an object of observation, but also a long case story, a description of a plant or of an animal, the account of one's reading, or other political or religious news. Moreover, this also lent a good deal of weight to what could have just been a fortuitous choice: separating what was thought and written together could have important consequences.

Collecting letters was, however, a somewhat unrewarding task. They were not intended for the same kind of display as objects collected in Gessner's museum might be. Bits of papers, scrambled words, torn leaves certainly did not have the same appeal as stuffed rare birds or exotic plants.⁴⁴⁷ The story of letters and *schedae* thus remains untold by biographers, and Gessner himself said little about them, except that there were many of them. Moreover, letters escaped the formal boundaries between objects, books and plants. Some Gessner bound with books, e.g. a letter including a catalogue of fishes sent by Johannes Hospinianus,⁴⁴⁸ another, with recipes on plague, he left with his tracts on the subject.⁴⁴⁹ Because they were packages made of paper and objects, letters perfectly fitted the middle space between objects for philological research and support for direct

⁴⁴⁷ This has to be nuanced for letters by great men, which were one of the cravings of sixteenth-century scholars. It is in fact possible that Gessner kept such letters in a specific book, as the reference "C. 22" in the copied extract of Aldrovandi's letter indicate.

⁴⁴⁸ "Epistolam illam tuam ligaveram cum libello quodam meo argumenti de piscibus ; unde factum est, ut respondere oblitus sim." Letter to Hospinianus, 05.02.1558, *Ep. Med.*, f. 102r.

⁴⁴⁹ Sadly, no letter remains today within Gessner's books.

observation, a space early modern naturalists liked to occupy.⁴⁵⁰ *Schedae* among papers, they were a trace of Gessner's experience at the same level as his other papers: his case notes, his recipes, etc, all lost in the overall chaos of his study.⁴⁵¹ Letters, kept with his other bookish collections in a study which acted as a museum and as a library, were thus incorporated in the body of his knowledge, very materially. Sometimes, he glued them; otherwise, he was contented with classifying them among his other papers. Sometimes, he resorted to a much more radical method: dissection.

Fragmenting letters into matters of fact

Gessner pushed to their extremity the reading techniques he applied to his letters. Not only did he divide the various points by a thorough annotation of marginal headings, but he even separated the fragments physically with his own scissors: as he wrote to Jean Bauhin, in 1563:

I am sorry that the two letters I wrote to you were destroyed: I cannot remember what I had written in them, nor find the letters from you which you wanted me to answer finally. Indeed usually, once I have answered them, I throw letters into the piles of my papers, and even cut them into pieces and classify them with my papers according to their headings.⁴⁵²

⁴⁵⁰ On the relationship between early modern naturalists, books and nature, see Adrian Johns, *The nature of the book, Print and knowledge in the making*, the University of Chicago Press, Chicago, 1998 and "Natural History as Print Culture." In N. Jardine, J. Secord, E. Spary (eds), *Cultures of Natural History: from Curiosity to Crisis* (Cambridge: Cambridge University Press, 1996), 106-24. It has been amply demonstrated that early modern naturalists tended to read books while looking at nature, and that, contrary to what has often been claimed in earlier decades, these two approaches were not opposed. See Grafton and Blair, "Reassessing humanism and science", *Journal of the History of Ideas*, 53(1992), pp. 535-540.

⁴⁵¹ Letters thus appeared sometimes unexpectedly in Gessner's study. He once wrote to Holtzach (31.01.1562, *Ep. Med.*, f. 85v) "Ad ultimam epistolam tuam putavi profecto me respondiisse, adeo memoriam mihi intricarunt nimiae occupationes : a quibus paululum respirans hodie, dum chartas in Musaeo meo confusas dispono, inuenio literas tuas (et miror) sine signo, quo notare soleo illas, ad quas respondi, quamobrem ignoscas homini ut occupatissimo, ita obliuiosissimo omnium, tui uero semper amantissimo."

⁴⁵² « Literas binas ad te intercidisse doleo, non memini quid in eis scripserim, nec epistolas tuas ad quas tu velles me denuo respondere, inuenio. Soleo enim postquam respondi, in acervos schedarum mearum

This cut-and-paste method was one Gessner was particularly proud of. He had once given a very elaborate description in his *Pandectae* of the recommended techniques,⁴⁵³ and apparently practised them extensively, whether on books or on letters. It involved copying the headings on leaves of paper, cutting the leaf into pieces, and distributing the pieces in little receptacles or on various locations on a table. One could also cut a book into pieces, or rather two copies of the book, one for the recto and one for the verso. Then, one could fit them in a sort of book, crafted for this purpose, by sliding them under strings of thread. Variations involved the way of crafting the book, all intended to maintain the slip of paper in its chosen location until it would be put to use, in a lecture, in the writing of a book, or for any other purpose. They could be taken out of the book, put into order, copied down and then put back in the book for further use.

This method differed from those widely promoted by other early modern scholars, and especially from the commonplace book, insofar as what mattered in Gessner's way of indexing was that the slips of paper should remain mobile.⁴⁵⁴ The strings, the slips of paper, the use of a special glue, one that would stick them to their place but be easily removable, everything was devised to make the collection of slips of paper reorganisable and reusable countless times.

Gessner clearly did not limit his treatment of papers to the mere construction of indexes: as he told Jean Bauhin, his letters were a chosen victim for his scissors. Actually,

Epistolas conjicere, etiam dissecare, et pro argumento cum schedis meis distribuere. », in *Epistolae*, 1591, p.126.

⁴⁵³ Conrad Gessner, *Pandectae*, I, 13,2, f. 19v-20r.

⁴⁵⁴ The interest of scholars in such techniques of indexing, cutting and pasting, classifying information materially has been widely commented upon. Ann Blair has provided an overall review of the various techniques used by sixteenth-century humanists in "Reading Strategies for Coping with Information Overload, ca. 1500-1700," 2004. The only device she reports that could be assimilated to Gessner's technique of cut (and paste) is Vincent Placcius' *scrinium literarum* ('literary chest') at the end of the 17th century. It bears the same features of moveable slips of paper, and made, he claimed, the filing of books and printed papers easier.

they fitted perfectly the requirements for such a technique. They were, by nature, moveable, especially their paper part. Loose leaves, they were particularly suited to this kind of organisation of knowledge. Most of them followed linearly one or more points of discussion, thus making it both necessary to cut and easy to decide where to start and end the cutting.

Once letters had received an answer, the epistolary dialogue moved on to another stage. The apposition of the mark reminding Gessner he had answered the letter also changed the status of the epistle. From the private, or relatively intimate dialogue with the correspondent, the letter became something that could be shared, as we have seen in Chapter 3, and something that could be classified and take its place in the organisation of knowledge.

Gessner thus cut them up, following the headings he had defined through his reading, and then threw them, as he puts it, onto the heaps of papers littering his study.⁴⁵⁵ But this also makes it very difficult for the historian to find them. Letters have a strong tendency to get lost, as the scholar complained; fragments of letters have practically no chance to survive.

Perhaps the best illustration of this fact would be a quick look at Gessner's correspondence on animals. We know it must have been rich from the several dozen correspondents he listed in the prefaces of the four volumes of the *Historia animalium*. To the best of my knowledge, only one letter from a physician from Solothurn, Apollinaris Buckhard, survives with its annotations by Gessner.⁴⁵⁶ Another one exists only in a copy

⁴⁵⁵ Gessner seems to have spent some time classifying these papers, as he explains to Hospinianus. However, it seems that this stage came after an interesting stage where everything was thrown together in Gessner's study –museum, and assumed suddenly the status of *schedae*.

⁴⁵⁶ ZBZMsC50a38, 22 May 1560.

made by its sender: Jean Ribitt, in Paris, kept note of a letter describing the *omble*, a fish. Finally, Gessner retained an annotated copy of a 1561 letter to John Caius.

The letter from Buckhart was thus the only one, among the letters he received about animals that he kept fully and which did not disappear under his scissors.⁴⁵⁷ It offered a long meditation upon the honesty of a lady of Lucerne followed by two shorter points: one on medical springs, the second on what Gessner terms in his annotation some unusual birds, “*aves insolitae*.”

The unusual birds we saw here last winter were little birds called finches, of the same size and generally similar to them (especially to the females) in colour, but a little more developed and a yellowish beak, and only black on the extremities. Its voice was not the same, but less refined, and somewhat raucous: to sum it up, they represented our finches so beautifully that nobody dared to doubt or contest that they were of this genus. They were noted for their incredible number, they only populated woods, and mostly beech woods. They were seen for three or four months.⁴⁵⁸

Gessner's first annotation pointed to the unusual character of the bird. Once more, what attracted his interest, as an early modern naturalist, was the novelty of the story. A second reading, however, perhaps explains why he did not select the passage for cutting and pasting: he noted, in another almost illegible ink: “[rusticum et suspectum]”. Cutting letters thus served as a first choice between those which carried the new and rare facts early modern naturalists thrived on, and the others. In the archives, except for a few letters in a controversy, the epistles historians have examined were often those Gessner did not feel

⁴⁵⁷ A much larger number was printed in the *History of Animals*, as we shall see in the third section of this chapter

⁴⁵⁸ “*Aves insolitae quae hic visae sunt praecedente hyeme, fuerunt aviculis quas fringillas vocant, magnitudine aequales, et omnino iisdem quoque cum illis (praesertim foemellis) coloribus, sed paulo explicatioribus, et rostro subfla[v]us, in extremitate tantum nigro: Vox autem non erat eadem, sed magis incondite, et rauca quodammodo: summa ita representabant fringillas nostras pulchriores, ut dubitare aut negare nullus fuisset ausus, quin essent de illarum genere. Multitudine autem notabant incredibili frequentabant solas sylvas et praecipue faginetas. Tribus aut quatuor mensibus visae sunt.* » ZBZ MsC50a f. 247.

any (or enough) interest in: form letters or letters without any news that would satisfy the usual criteria of new and rare. They were useless letters: letters for which he had no further use, which, once the epistolary dialogue had left them behind, would have no afterlife. The letters, just like any other object of knowledge, were also objects of collection: not just for display, nor for simple dialogue, but also for further use in the elaboration of knowledge.

This criterion, however, does not totally account for Gessner's selection of letters for dissection. In the *Thesaurus Medicinae Practicae*,⁴⁵⁹ under the heading of dropsy, were collected, among recipes, case notes, and copies of a manuscript treatise, parts or all of nine letters: one anonymous fragment discussing "whether one can allow a woman suffering from dropsy to breastfeed?";⁴⁶⁰ an anonymous fragment of a German letter with a

⁴⁵⁹ This three-volume in folio manuscript, kept in the Zentral Bibliothek in Zurich, has not, as far as I know, been studied by historians interested in Gessner. This might be due to the fact that few people have realised that some letters were cut and pasted there, because for the most part, the collection looks as if it is entirely made up of recipes for remedies. It is not, and the collection represents a wonderful source for the study of Gessner's medical practices. It contains a number of his case notes, often with the name of the patient, and details concerning him, epistolary consultations, *consilia*... -, and of his correspondence: letters related to different diseases were cut and pasted into it. However, it raises problems of attribution. It was the result of Gessner AND Wolf's work, and certainly mostly of Wolf's. It is nonetheless possible to assert that Gessner had constructed such files and had intended to bind them. Indeed, the chapter on Colics bears a heading in Gessner's hand (MsS204b154v). Pasted on the front leaf of the first volume, a list of headings in Gessner's hand proposes a draft for an organisation of medical knowledge (See Appendix V). The top of several leaves (especially of chapters mentioned in Gessner's list of headings) has been cut, but there are traces of another heading (in black ink, while Wolf's heading are in red), in a handwriting that could be Gessner's. There is at least one folio bearing an annotation by Gessner on the support leaf (and not on the fragment) [MsS204a 233v]. Moreover, a number of fragments were copied on folded papers, and they bear the instruction Please turn ("VERTE") on the first page, thus indicating that they were intended to be pasted. Finally, and more importantly, the frequent mention of the name of the author of the letter in the margin seems to me indicative of a letter fragmented by Gessner. However, I would like to think that the way Wolf or Gessner treated the fragments is in itself interesting, because it indicates a new way of looking at letters as material for a practice-based medical knowledge. What the *Thesaurus* offers us is, thus, a record of a physician's experience, or rather, of several physicians' experience: that of Caspar Wolf certainly had swallowed that of Conrad Gessner..

⁴⁶⁰ ZBZMsS204b241r.

proposed treatment;⁴⁶¹ another of a Latin letter, mentioning a rare case of blood vomiting in dropsy;⁴⁶² a consultation by letter copiously annotated;⁴⁶³ two fragments reporting a cure, one anonymous, the other ascribed by Gessner to Felix Platter;⁴⁶⁴ a fragment of a letter from Antwerp apothecary Pieter van Coudenberghe describing a recipe; another fragment of an anonymous letter, reporting a possible remedy;⁴⁶⁵ and a complete letter from Achilles Gasser, dealing with authorities concerning the disease, possible remedies and reported cases.⁴⁶⁶ Practical *quaestiones*, rare cases and cures with proposed treatments and consultations by letter were gathered around a single disease. The only two letters kept in full – the consultation by letter and Gasser’s epistle – provide us with complete treatments – and in the latter case, a short authoritative and theoretical discussion. Thus, letters which were not divided into their various parts were those which focused completely on one subject –in this case, even the salutations were kept. Meanwhile, letters reporting cures, or praising a new remedy, among other subjects, were immediately fragmented: what counted was the fact carried by such short stories, centred on one point and one disease.

⁴⁶¹ ZBZMsS204b242r.

⁴⁶² ZBZMsS204b242r.

⁴⁶³ ZBZMsS204b257r-v.

⁴⁶⁴ ZBZMsS204b258v and 264v. On the anonymous fragment on f. 258v, the end of the last sentence is copied down in Gessner’s hand, indicating that this last sentence was included in another fragment of the letter.

⁴⁶⁵ ZBZMsS204b264r.

⁴⁶⁶ ZBZMsS204b270r-v.

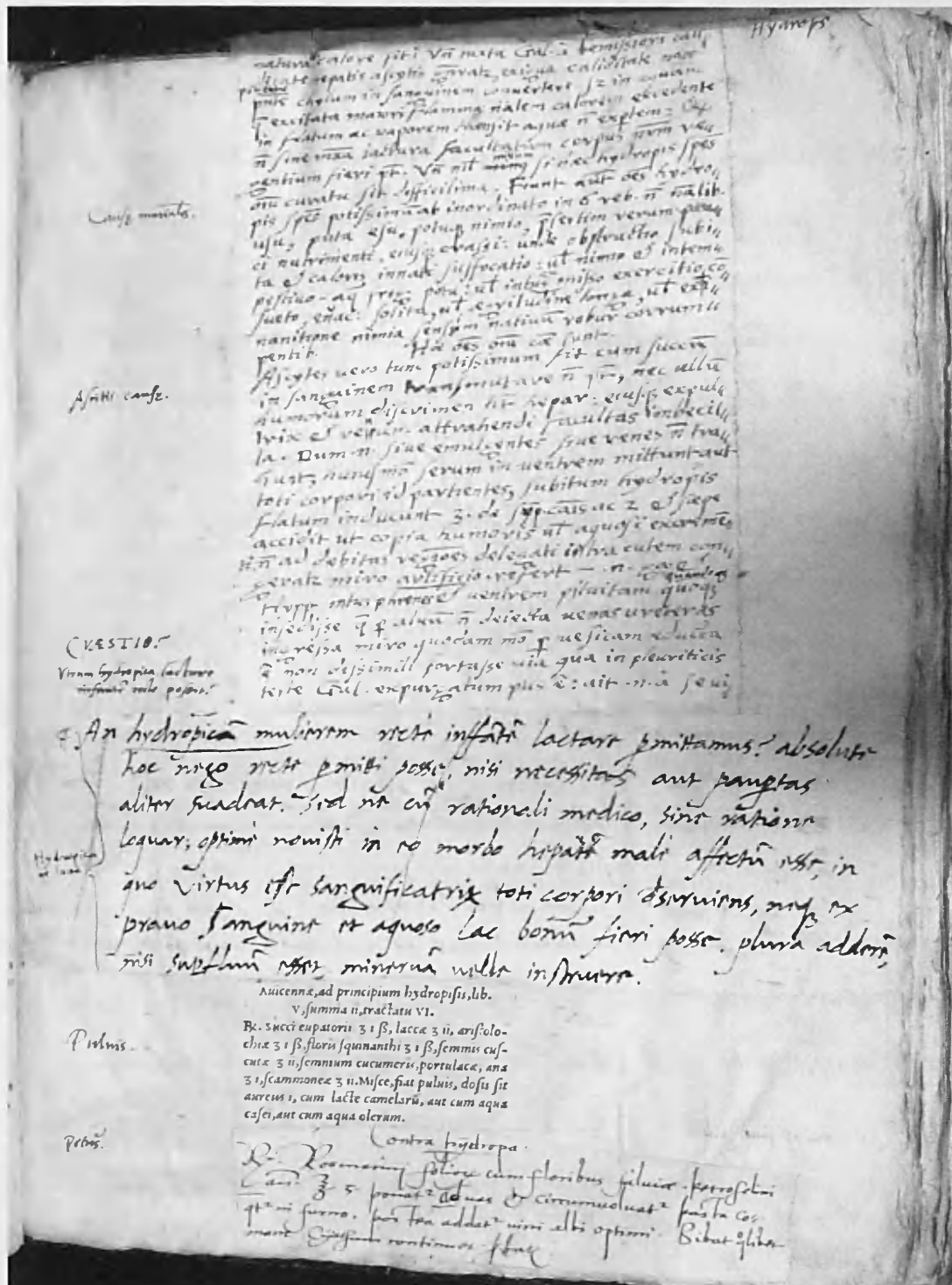


Figure 14: A page of the chapter on dropsy. It includes a fragment of a consilium by Helideus, copied over several pages, a fragment of a letter, annotated by Gessner and Wolf, a recipe for a powder; extracted from a printed book and another recipe, ZBZ MsS204b241r.

Fragmenting letters recentred the purpose of the fragment, changed the letter into a *historia* from an ongoing conversation.⁴⁶⁷

This fragmentation, however, had an important consequence: it destroyed the initial letters, thus making the constitutive element of the fragment something that could not change any more with time. It could be reduced, admittedly, but whatever had been cut out could not be reintegrated in the body of knowledge, except by an effort of copying down the sentences attributed, for instance, to another fragment (and this effort Gessner rarely made, as far as I know). This raised two problems. First of all, it fixed the contents of the matter of fact, but not its position. Secondly, the reusable character of the letter totally depended, on the one hand, on the way Gessner had read it initially, and on the other hand on the place in which it had been integrated. He accompanied his initial reading by marginal titles. Margins thus offered a synoptic view of the contents of the letters. Whether a plant, a remedy, the wonderful story of a cure, he could grasp them at a glance. The first annotating reading thus ascribed a meaning and a specific outreach to the different points of the letter: their further use, under the guise of fragments, depended on their first reading. On the other hand, the destruction of the letter required that the fragments, to be reusable, would be copied down or somehow repeated in another form, on another backing. Amanuenses could copy them down,⁴⁶⁸ or Gessner himself could insert their contents in his paintings, his books' margins, or even in other letters. These changes of backing contributed to producing a knowledge based on matters of fact.

⁴⁶⁷ In these cases, the epistolary quality of the letter was often erased: indications of the dialogue are cut out of the fragment, addresses, etc. But this was not a necessity, and sometimes, direct forms of address remained.

⁴⁶⁸ Gessner carefully proofread these copies and made substantial or detailed alterations.

Section 2: Pasting in letters: accumulating experience

While the main interest of this indexing method was to keep the fragments moveable, many of them were nonetheless destined to be pasted, in an attempt to produce a more definitive sort of knowledge. The water glue, sometimes mixed with flour, fixed, for a while, the state of Gessner's knowledge, or at least, of his experience.

The chapter on "*Capitis dolor Hemicrania*" – on Migraine – in the first volume of the *Thesaurus Medicinae Practicae*, illustrates very well the way pasted letters became part of the process of elaborating knowledge. Gessner composed it at least in part.⁴⁶⁹ It began on folio 51r with a letter in German, written from Wunningen by a Jacob Hug to his father on 4 November 1561. The young man complained of a very severe headache, which had prevented him from standing in the morning, and asked his father to consult either Dr Taddeo Duno or Dr Gessner on his behalf. The father apparently chose the latter, who annotated the letter: he summarised the complaints of the young man and wrote out a first prescription, then a second prescription dated November 13 following a bleeding. The order for the first prescription was appended, with a mark in his hand. On the verso, another consultation by letter on the behalf of the niece of Daniel Engelberg von Mass, from Chur, on 12 May 1562.⁴⁷⁰ Once more, the case was profusely annotated, and the remedies given were inscribed in the margin, as well as a mention of the existence of an original flask of urine, most probably discarded after examination. This mention associated the flask with the letter, and thus made it a part of the record. The following folio [52 r] presents a series of recipes in Gessner's hand or in those of his amanuenses, or perhaps

⁴⁶⁹ Some fragments are annotated in Gessner's hand on both the fragment and the backing folio (MsS204a51r, continuation of the slash around *Jac Hug* on the backing leaf). Most probably, what is now the verso was initially the recto: the title of the page appears on the verso, and not on the recto.

⁴⁷⁰ ZBZ MsS204a 51v

extracted from letters. A recipe for pills copied down from a book by Fumanelli,⁴⁷¹ a anonymous fragment of a letter again describing pills for migraine, another for a powder, two lines in Greek, a bit of a printed text of unknown origin (Gessner entitled it first *tragema pro capite*, then changed the last word to *hemicrania*, thus probably indicating he had tried it). A copy of a recipe by Alexander Benedictus,⁴⁷² and the draft of an edited case note completed this leaf.⁴⁷³ The verso bears again fragments, this time of several cases, sometimes with recipes given to people who later became patients of the town physician of Zurich. Finally, a note by Gessner of some remedies simply included a reference to Section 20 of Nicolaus Myrepsus' *De compositione medicamentorum*.⁴⁷⁴

Knowledge of migraine was thus cumulative: apparently following chronological order, the chapter gathered together all the remedies Gessner had encountered. This is hardly surprising: the propensity of early modern naturalists – first and foremost Gessner – to gather matters of fact has been commented on at length by historians, who made this interest in compiling and this universal aspiration one of the main streams of Renaissance scholarly enterprises.

Gessner collected experience, his own and that of others: authors and patients. Case reports as much as the case or the history of the patient highlighted the history of the

⁴⁷¹ It may be Antonio Fumanelli's *Opera multa et varia, cum ad tuendam sanitatem, tum ad profligandos morbos plurimis conducentia*, Zurich, Gesneri fratres, 1557. The copy ZBZ[IB3.1 belonged to Gessner. This raises an interesting point considering he took the time to copy a book he already possessed.

⁴⁷² Alexander Benedictus (d. 1525) was the author of several treatises of medicine, including *De pestilenti febre sive pestilentiae causis* (Venice, 1493); *Anatomice sive historia corporis humani* (Venice, 1493); *De re medica opus insigne... omnium a vertice ad calcem morborum signa, causae, indicationes, etc., libris XXX conscripta* (Venice, 1535).

⁴⁷³ Gessner drafted his edited case note: he added three sentences of presentation in the beginning, after he had already copied down the details of the case, and then the remedies he had used appear in the margin. Obviously, the paper already has a history and was completed little by little.

⁴⁷⁴ Nicolaus Alexandrinus (Myrepsus), *Liber de compositione medicamentorum secundum loca*, Ingoldstadt, Alexandre Weissenhorn, 1541, featured in the list of Gessner's books, [ZBZ Z RR 1820], with a dedication from Occo to Gessner.

patient's treatments. He carefully recorded in the *Thesaurus* the remedies his patients had been given by others, as much as the treatment he himself had successfully tried. In the chapter on migraine, Frau zu Kindli was cured, he marginally indicated, by bleeding:

As she suffered terrible daily paroxysms in the other side of her head, I applied on this side [...] we cut the vein on the right arm, and after three days, I purged her under the tongue [...] (and I gave her Theriac).⁴⁷⁵

Nonetheless, Gessner kept and annotated very carefully the *consilia* she had received, with their various remedies: the prescription for a mixture of theriac, Oil of *karabe*, and *aqua melissa* he had proposed, but also another one, received from someone else, and including various remedies based on *karabe* and *rosa nigra*, on *mastiche*, on rose syrup, and on *centimorbica*.⁴⁷⁶ The fragment was kept as a reminder of what had been already attempted, but also as a model of possible *consilia* for *hemicrania*. Similarly, the case of the librarian suffering from pleurisy, profusely described in his letters to Johannes Funck and to Jean Bauhin, only existed in the *Thesaurus* in the form of a brief note, mentioning the remedy the old man had received from an empiric before consulting him.⁴⁷⁷ More than their eventual success or failure, what counted was the variety of the available remedies. In the case of pleurisy, for instance, Gessner even listed a remedy he qualified as a "superstition": drinking wine or water in which a sword that had killed a man had been immersed three times.⁴⁷⁸

⁴⁷⁵ "Cum doleret altero latere capitis tunc quotidianis paroxysmis, [frictiones] ego Alexum folium lateri affixi, venam secui in brachio dextris lateris, et post 3 dies sub linguam purgavi decoctione [communi etiam] (Theriacam dedimus)" MsS204a52v.

⁴⁷⁶ MsS204a52v.

⁴⁷⁷ MsS204b45r, Letter to Funck (21.01.1564), ZBZ MsF60.52 *Ep. Med.*, f. 96r, Letter to Jean Bauhin, 07.01.1564, *Epistolae*, p. 140.

⁴⁷⁸ MsS204b45r. This relative lack of emphasis on the success of treatments provided ideal ground for a physic of the medication rather than of the balance of the body: long lists of remedies were more important, as a vademecum for the physician, than their result, but they placed the emphasis on the medication nonetheless. Moreover, it has to be linked with the fact that every remedy came within a history of the

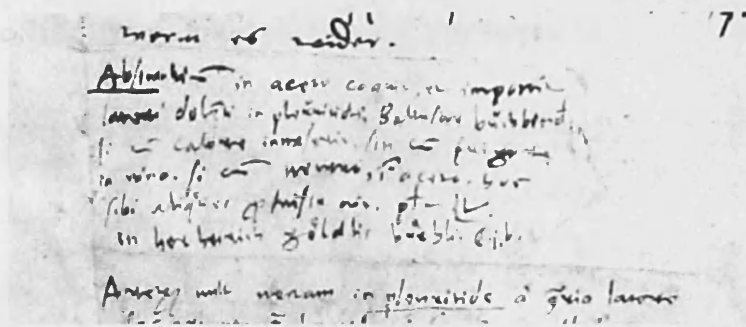


Figure 15: Note on the remedy tried by D. Balthasar (ZBZ MsS204a 45r)

Pasting together fragments of his own experience – experiments, successes or failures, letters describing the patient's own feelings and pain – and remedies given by others (in books, letters or hearsay), Gessner thus condensed not only his experience, but also that of his patients, of ancient and modern authors.⁴⁷⁹ The *Thesaurus* was not merely a museum to record experience, but a space in which knowledge could be produced. Cumulative knowledge was constructed through this careful recording of experience. The multiple readings and the passages used again and again themselves created new knowledge.

Pasting in letters, however, fixed them on a specific leaf. Cut-and-paste practices had the inevitable drawback of destroying the original. In order to reuse material, it was thus necessary to copy it down into something else. Outside of the epistolary dialogue, letters metamorphosed into something different: part of a text or part of a picture.

individual patient: what legitimised it was in a way not its success, but the very fact that it had been tried on someone (successfully or not). This can be read as normal in the sense that this sort of medication was all physicians had to fight disease.

⁴⁷⁹ To put it differently, letters thus became sources, in the same way they now are sources for historians: they were loaded with history, and examined as such, but they also were material for knowledge. This knowledge had no end: Wolf himself added his own experience to the record, apparently pasting the leaves upside down, and changing rectos into versos and adding titles to the pages, but mostly pasting in his own comments, reading notes and case studies.

Changing the backing: letters, books, pictures

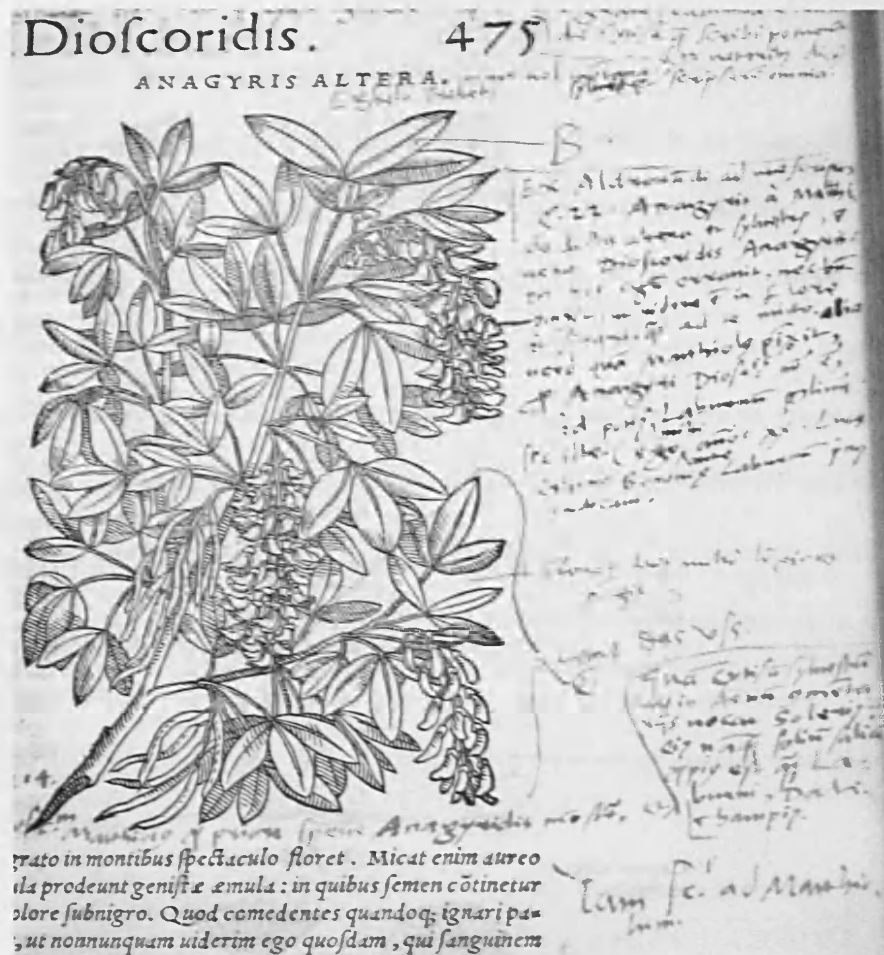


Figure 16: Gessner's annotations on his copy of Mattioli's Commentaries on Dioscorides (ZBZ Z Dr M 438)

Gessner's letters thus moved to the leaves of his own copy of his *Historia Animalium*⁴⁸⁰, where, according to Urs Leu, they played the role of additional reports, but also to other books he owned. He lavishly illustrated and annotated his copy of Pietrandrea Mattioli's 1558 *Commentaries on Dioscorides*.⁴⁸¹ In the margins, he painted the plant he

⁴⁸⁰ Marginal annotations of Gessner's *Handexemplar* of the *Historia Animalium* and of the *Bibliotheca universalis* were described by Urs Leu as full of cross references to other books or to letters, material kept in view of a re-edition. See Urs Leu, "Marginalien Konrad Gessners als historische Quelle" *Gesnerus* 50 (1993), 27-47.

⁴⁸¹ Pietrandrea Mattioli, *Commentarii secundo aucti in libros sex Pedacis Dioscoridis*, Venice, Vincente Valgrisius, 1558. Gessner's copy, can be seen in the Zentral Bibliothek of Zurich [ZBZ Z Dr M 438].

proposed for identification with the ancient plant, but also reproduced parts of his correspondents' letters.

On f. 475, for instance, in the middle of a chapter on the *anagyris*,⁴⁸² Gessner, in his marginal annotations, commented on the quality of the picture, but also copied excerpts of two letters, one from Jacques Dalechamps,⁴⁸³ and the other from Ulisse Aldrovandi.⁴⁸⁴ If, as we shall see, Gessner used to remark on any picture he came across, these engravings were of peculiar importance for him, as he had entered into a dispute with Mattioli about this specific plant.⁴⁸⁵ Adding, to his usual comments, extracts of letters from these two men, who were regular correspondents and exchanged with him samples of and views on plants, reflected the momentum of a thorough analysis of the picture and of Mattioli's commentary. The extract of Dalechamps' letter brought a new testimony in the discussion:

I think this is the plant, which Mattioli⁴⁸⁶ shows in his Dioscorides as the first species of Anagyris, and which Solerius⁴⁸⁷ calls in his Commentaries on Aetius *cytissus sylvestris*, and this plant is not merely not *salicis opponus*, but even *laburnum*.⁴⁸⁸

⁴⁸² Mattioli, *Commentarii*, III, Chapter CXLIX.

⁴⁸³ Jacques Dalechamps would be, from 1586 onwards, the author of a *Historia Generalis Plantarum*. The passage quoted by Gessner was an excerpt of a letter.

⁴⁸⁴ While Gessner remained friends with Dalechamps, his relationship with Ulisse Aldrovandi cooled after the controversy.

⁴⁸⁵ In the years 1554-1560, Gessner entered into a controversy with Mattioli on several plants, partly via his *De raris et admirandis herbis*, and partly via the publication of an exchange of letters with Melchior Guilandinus. I will not enter here into the detail of the dispute: it was fierce, many-sided and long-lasting, and took place on different battlefields. Interestingly, however, in the course of this controversy Gessner chose to collect letters, opinions of colleagues, etc, instead of using other rhetorical means. This illustrates quite well one of Lorraine Daston's hypotheses that the emergence of matters of fact coincided with the desire to erase scholastic disputes from the scientific scene, the matter of fact appearing as the solution to prevent endless disagreements (Lorraine Daston, "Baconian facts, academic civility and the prehistory of objectivity," *Annals of Scholarship* 8 (1991), 337-363).

⁴⁸⁶ Mattioli, *Commentarii*, III, Chapter CXLIX.

⁴⁸⁷ Aetii medici graeci contractae ex ueteribus medicinae tetrabiblos quaterniones...accesserunt in duos priores libros,... scholia,..., per Hugonem Solerium Sanoniensem,..., Lyon, G. and M. Berigorum fraters, 1549. Hugo

Quoted because it corroborated Gessner's opinion, the extract of letter offered the testimony and authority of a famous botanist, a common practice in sixteenth-century natural history.⁴⁸⁹ Its incorporation within the apparatus of reading annotations, however, conferred another status on the letter: copied down in Gessner's own hand, Dalechamps' words, just like Aldrovandi's, became part of their first reader's experience.

The incorporation of Aldrovandi's letter reinforced this merging:

From the letter written to me by Aldrovandi, Charta 22: "What Mattioli calls *Anagyris* is different from the *Anagyris sylvestris*, and from the true *Anagyris* of Dioscorides. Indeed, in his picture, he has embellished, and not properly painted the plant, as you can see in the plant and pod I send you. Another new plant Mattioli painted for *Anagyris* of Dioscorides is not that plant, but rather, in my view Pliny's *laburnum*." So he said. (Twenty years ago I showed Luca Ghini of Bologna Pliny's *laburnum*.⁴⁹⁰

Here, Aldrovandi's letter came as a comment on the quality of the picture. But its authority did not rest merely upon the name of its author, who was already famous. Within the letter, the plant itself had been enclosed, guaranteeing autopsy from both sides of the epistolary exchange. The material character of the letter thus entered the margins of the

Solerius gave a commentary on Aetius, preceding the Latin text. On the verso of the page bearing the signature Bb2, he assimilated the *cytusus* to Pliny's *laburnum*.

⁴⁸⁸ "[First words illegible] eam esse puto, quam apud Dioscoridem Matthiolus pro priore specie Anagyridis monstrat, et quam cytisum sylvestrem suis in Aetium commentariis vocat Solerius eique neque solum salici opponi est sed quoque Laburni, Dalechampius." ZBZ Z Dr M 438, f. 475.

⁴⁸⁹ Such a practice was common outside of the boundaries of books: Mattioli himself, as we shall see, published several books of Medical Letters which were really letters of support from the most famous physicians and botanists of his time. Gessner's way of adding epistolary testimonies to notes reporting his own experience also involved this supportive dimension.

⁴⁹⁰ "Ex Aldrovandi ad me scriptis, C. 22. Anagyris a Matthiolo dicta altera est Sylvestrae, et verae Dioscoridis Anagyris. In hac ig[itur] ornavit, nec [bene] pinxit, ut videre est in flore et siliqua, quos ad te mitto. Alia nova quam Matthiolus pinxit pro Anagyri Dioscoridis non est, sed potius mihi Laburnum Plinii. Hoc ille. (ego ante annos XX Lucae Ghineo Bononiae Laburnum Plini indicavi)." ZBZ Z Dr M 438, f. 475. Pliny mentions the *laburnum* in his *Historia Naturalis*, XVI, 76 and XVII, 174. The way Gessner referred to Charta 22 of Aldrovandi's letters to him may indicate that he possessed a copybook for such "important correspondence", or that Aldrovandi's letter was in fact more of a memorandum. As both are lost, it is impossible to decide.

book, and introduced experience, and shared experience at that,⁴⁹¹ into Gessner's reading of his old enemy's sentences. Similarly, his comments at the end of the passage of Aldrovandi's letter pushed to the foreground his biography: his claim to have identified Pliny's *laburnum* twenty years earlier answered Aldrovandi's remark on Mattioli's false identification.

Three dialogues thus took place in the process of annotation Gessner applied to his book. First of all, marginal titles denoted the experienced reader, able to summarise the contents of a text in a few words. Other notes were the result of a dialogue between scholars, which took place in the virtual, but extremely material space of the book leaves and represented answers to the author's assertions. Finally, letters, copied down in the margins, came as appendices, records of Gessner's, or more exactly, of the correspondent's experience: another voice rose in the dialogue between author and reader, without interrupting it, but mixing with those of the two main protagonists: Aldrovandi, Dalechamps, quoted in the margins, lent their weight to their correspondent's thoughts, or, sometimes, to his experience.

Paintings and letters: the several layers of *historia*

This transfer of letters into book pictures also illustrates the strong bond between both supports of knowledge: pictures and letters. More than a link between picture and text, letters and paintings enjoyed a specific relationship: one that was born partly in the fact that pictures were, often, in Gessner's case, the very motive for the epistolary exchange and partly in the fact that pictures were an integral part of the epistolary parcel.

⁴⁹¹ The fact that the experience was shared is important: what made the matter of fact true was the consensus over it. Viewing the same plant, thanks to letters, created the conditions of the consensus. The specificities of the epistolary dialogue, which always assumed a common language and common references between the two correspondents, made this consensus possible.

Indeed, a quick look at Gessner's paintings shows the importance assumed by correspondence not only in the exchange of paintings, but also in the elaboration of knowledge. Thus, on the picture of a *Clematis*, called by its sender *Gallorum thlaspi*, he wrote:

He did not paint well. The leaves are not divided like that, neither do they look at all like that. He says that one calls this plant the little flame of French Thlaspi. When tasted, it burns the mouth and the tongue extraordinarily, and I don't know whether I have ever tasted such a violent bitterness...⁴⁹²

Such multi-layered sources remind us of several things. The first one is that pictures were, at some point of their 'life', parts of letters: together with many other objects, and even sometimes with the objects they represented, they were enclosed in the envelope, in the same way the text of the letter was. While the fragmentation of the letters could separate text and picture, they remained closely linked in the elaboration of knowledge.

Moreover, traces of the circulation of the picture remained in the annotations made by Bauhin. While this practice seems to have been quite common, it nonetheless changed what could have been termed 'personal notes', whether in the form of a picture or a written text, into a collective production of knowledge. Thinking about pictures and paintings, assessing and discussing their quality, was second nature for Gessner and his colleagues. While the debates on the role of pictures in books were, as we shall see, very acute at the time, the use of paintings not merely as a tool for identification, but mostly as a space for

⁴⁹² "Non bene pinxit. Folia non ita divisa sunt, nec utriusque [talía] Hanc plantam (inquit) Gallorum thlaspi flammulam vocant: gustata os et linguam super modum inflammat: nec scio an unquam gustarim tam vehementiorem acrimonium" MsZVIII394 196b.

the exchange of ideas⁴⁹³ and as food for thought, so to speak, seemed to be accepted and taken for granted.⁴⁹⁴

Finally, Gessner built knowledge as a ensemble of several layers: two pictures, painted by others, commentaries extracted from correspondents' letters, notes taken at various moments of the life of the plant, out of careful and long observation, were superposed on the same leaf. Brian Ogilvie calls this process a 'condensation of observations'.⁴⁹⁵ It seems to me that rather than a condensation, it was a juxtaposition. Being put together did not change the nature of the many elements written or delineated on the leaf. Instead, each remained visible, kept its individuality and its historicity: dates were sometimes added. The handwriting made it possible to identify the author of the note, and he sometimes signed it himself. At least Gessner made a note of the attribution of the words. Each fragment of experience, reported besides the painting thus took on a historical thickness. It was inscribed in the biography of a man and in the universal time of scholarship. More importantly, place mattered. Each of the various locations where the plant had been observed was the object of a note, and of the copy, sometimes, of the letter sent by the correspondent. Thus, on the picture of the *laburnum arbor alpina*,⁴⁹⁶ painted from a dried plant, Gessner mentioned another name, the fact that the plant could be found near Nuremberg and Augsburg, the colour of the blossom and of the seeds. An extract from a

⁴⁹³ Just like letters, or because they belonged to letters, pictures and paintings became not only an object of knowledge, to be gathered and kept, but a space for exchange, very materially. One can also imagine that some pictures did circulate between correspondents, in order to be copied, or simply commented upon by the receiver, then sent back.

⁴⁹⁴ Thinking about pictures constituted a large part of the epistolary exchange. Most of the paintings of the Trew collection in Erlangen bore comments on the quality of the painting. This quality (generally summarised by *bene pinxit*, or *non bene pinxit*) was defined by the exact observation or reproduction of the plant. (cf on the plant by Forer, LsZVIII 394 196b) and on the origin of the drawing (from life, from a dried plant, etc.).

⁴⁹⁵ Brian Ogilvie, *The science of Describing*, 2006.

⁴⁹⁶ ZBZ MsZVIII394 a70.

letter from Caelio Secundo Curione⁴⁹⁷ followed, adding precise information on another possible name in another location.

Just like the wish of giving as many local names as possible for a single plant, moreover, the insertion of letters in pictures and paintings denoted the importance granted by Gessner, and other philologically trained scholars to the exact word, and to problems of authorship. Just as it belonged to a specific time, a specific place, each observation continued, even after its inclusion in the picture, to belong to its maker. Letters – directly written on the leaf, copied down by Gessner, or cut and pasted – were, for all these reasons, ideal material for the creation of knowledge: their conditions of production were engraved in the hand of their author, the address and the dates, or simply the words. These paintings were not only memoranda: they granted things a ‘historical thickness’, making knowledge of nature a polyphonic knowledge.⁴⁹⁸

Section 3: Printing letters, reporting knowledge?

Publication, however, changed the relationship between picture, objects and letter. From objects enclosed in the initial intimate space of the envelope, from excerpts pasted or copied on the painting, letters and objects became illustrations and texts within the bigger body of the treatise. It is this change this section will investigate. Letters were not merely important because they were a space for scholarly dialogue. All this integration in Gessner’s paintings, all this stocking up in his files for organising knowledge on plants, animals or medicine and this reading, cutting and pasting had a reason. He digested his letters for

⁴⁹⁷ This can indicate either that the picture was later circulated, or that it came into the hands of Curione after Gessner’s death.

⁴⁹⁸ Instead of historical thickness, Laurent Pinon talks of historical depth, in “Conrad Gessner and the historical depth of Renaissance natural history”, *Historia, Empiricism and Erudition in Early modern Europe*, Gianna Pomata & Nancy Siraisi (eds), Cambridge Mass., the MIT Press, 2005, pp. 241-267.

further use. They were the very matter out of which he would elaborate knowledge. Indeed, he went far beyond simply granting his correspondent's name the immortality of print.⁴⁹⁹ For many, their words themselves reached the printed leaf. Letters had an afterlife, and one that was, according to the Renaissance *topos*, everlasting.

Gessner's correspondence found its way into his most famous and most obscure works. The *Historia Animalium* and its editorial follow-ups (the *Icones*, for instance), but also several smaller treatises on plants welcomed in their leaves excerpts from letters. The chapter on the *tora venenata*, in the *De raris et admirandis herbis*,⁵⁰⁰ for instance, kept track of many epistolary exchanges, either closely integrated in the text of the treatise or under the guise of quotes or even large extracts. Gessner called as a witness Johannes Franciscus Malvetius in order to confirm the validity of the presence of the *tora* in the treatise on *Lunariae*, then named Alexander Peier, a physician from Schaffhausen, as the provider of the picture of the *tora* he possessed, and Gabriele Fallopius as the original owner. He also mentioned Johannes Kentmann, who had given him another, slightly different picture of the plant, and Guglielmo Gratarolo who corroborated the name of the plant represented on the picture. The number of letters is closely related to the role the chapter played in criticising Pietrandrea Mattioli and his Commentaries. The chapter identified the *tora Valdensium* with the *aconitum primum* of Dioscorides, thus targeting the picture Mattioli had given of the Ancient plant. In this controversial context, letters came in as testimonies of Gessner's *fides* and as proofs of the origin of the picture. Finally, after he had launched his attacks against Mattioli's picture, he added, at the very end of the chapter, two extracts of

⁴⁹⁹ Quoting the name of helpful correspondents was a common enough practice in the Renaissance. Gessner himself was for instance cited in Rondelet's *History of fishes* as the provider of the picture of the *silurus*, see note 530 page 245.

⁵⁰⁰ *De raris et admirandis herbis quae sive quod noctu luceant, sive alias ob causas, Lunariae nominantur*, a short botanical treatise devoted to the description of the different plants called *lunaria* in various regions, was published in 1555 by Gessner (Zurich, Andreas Gessner the Younger and Jakob Gessner).

letters he had received from Augustinus Maynardus and from an anonymous young scholar, both of which described the plant's aspect and virtues. Letters thus played several roles in the text of the treatise: they complemented pictures, themselves subject to important questioning in the middle of the sixteenth century, and anchored them in the reality of correspondence exchange. They brought witnesses in whenever they were needed, as well as a distinct personal tinge to their observations. But their insertion in treatises had other, less obvious consequences: because Gessner kept their individual voice and their distinctive dialogic character alive, they brought polyphony into the treatises.

Letters and pictures: complementarity, legitimacy and anchoring

Letters appeared in Gessner's treatises whenever pictures were at stake. They were, in the middle of the sixteenth century, a central issue for many naturalists when they published their works.⁵⁰¹ The question of the presence of illustrations in natural history books was acute. While market forces and early modern taste called for their presence, many scholars, including Gessner adopted a more nuanced point of view. For the town physician from Zurich, indeed, illustrations could convey elements that were not easily conceived from a verbal description, while words were more adequate to convey very

⁵⁰¹ The problem of images has long been debated among historians, and recently, long papers from Sachiko Kusukawa (on Vesalius) and Brian Ogilvie have discussed the issue and highlighted hot debates among Renaissance scholars. They have variously concluded that there was a close relationship between text and image, and discussed their complementarities. This complementary role played by text and pictures in treatises was strongly related to and facilitated by the insertion of letters in treatises: the authority of pictures was not only legitimated by a third person, but also anchored in the text by a letter that had enclosed (and, as I have shown, to some extent had been) the picture. Brian Ogilvie, "Image and text in Natural History, 1500-1700", in *The power of images in early modern science*, W. Lefèvre, Jürgen Reuer and Urs Schoepflin (eds), Basle, Birkhäuser Verlag, 2003, pp.141-166 and Sachiko Kusukawa, "The use of pictures in the formation of learned knowledge: the cases of Leonhardt Fuchs and Andreas Vesalius" in *Transmitting knowledge: Words, Images, and Instruments in Early Modern Europe*, S. Kusukawa and I. Maclean (eds), Oxford, Oxford University press, 2006, pp.73-96, and Saara Leskinen, *Reliable Knowledge of Exotic Marvels in Sixteenth-Century French and English Texts*, PhD dissertation, Warburg Institute, 2008, Chapter 5: 'Images and Objects as Evidence of Marvels'. (I am grateful for this last reference to Jill Kraye).

subtle *differentiae*.⁵⁰² I would like to argue that what Gessner was trying to do when inserting letters in his treatises was to propose a way out of a strict opposition between text and illustration. Why? Perhaps because letters and pictures were linked, from the beginning, by the time spent together in the envelope, because letters often commented on pictures, because pictures were the main reason, often, why letters were written.⁵⁰³

This coincidence and very material complementarity of letters and pictures, before they were turned into part of the text of a treatise and illustration, was one scholars were very conscious of, and one they insisted on with great persistence. Many of the illustrations in the *Historia Animalium* not only were accompanied by the letters they had been enclosed in, but explicitly placed in a close relationship with them. Thus, for instance, a picture of a *tragelaphus* sent by Georg Fabricius was introduced with these words:

Georg Fabricius, a man knowledgeable in all things and an outstanding poet, sent me, from Meissen in Germany, this figure, painted from life, together with a letter which contained these words.⁵⁰⁴

The close link between letters and illustration was enlarged to objects in the case of the *Mus ponticus* (flying squirrel), when Gessner gave an engraving of its skin and mentioned:

My dear Anton Schneeberger sent me two skins of *mus* from Vilna in Lithuania. "I send you (he said) a small skin, on which the surface of the hair is ashen or whitening; but at the root (that is the interior part) the hair is purple turning to black. Here, they call it Popyelycza latayacza, that is, Flying Mus ponticus because of its speed. It appears always too humid, so that furrier cannot prepare it. They use it to get rid of the eye-ache, because they are persuaded that there is some virtue in it in to calm and cure pains in the eye; as for me I would think that its softness calls for

⁵⁰² See Brian Ogilvie, "Image and text in Natural History, 1500-1700", pp. 156.

⁵⁰³ In the *Nomenclator Aquatilium Animantium*, only the names and the pictures of the fishes remained (1563): the quotations from letters have been erased. This seems to support Ogilvie's idea that pictures were for the uneducated: the text of letters was reserved for a scholarly audience, different from the more popular audience the *Nomenclator* was aiming at.

⁵⁰⁴ *Historia Animalium libri I*, Paralipomena, p 1101.

using it to wipe the eyes. But as the hair sticks out of the skin, this cannot be done without danger. Near or above the anterior feet, hair stick out as in a circle: they call them wings; some believe it can fly from tree to tree.” That is what he says.⁵⁰⁵

This time, letter, object, and picture were united by the discourse and made the complementarities of illustration and epistolary text even more striking. Epistolary discourse framed the picture of the skin, spread out to the corners of the book leaf, mimicking the flight of a living flying squirrel. Indications of the colour of the surface of the hair can be deduced from the light colour of the picture, but information on the hair roots, its Polish names and its use as ophthalmological remedy cannot be transmitted without words.

This practice of reuniting different components of the initial epistolary package, however, was not without consequences for the knowledge it produced. The chapter on the elk, *Alces*, in the *Icones Animalium* of 1553, mentioned a letter from Johannes Boner from Balicze, and bemoaned the loss of precious material in the course of the epistolary exchange (Boner had sent Gessner a horn and a nail, which never reached his addressee’s house). The missing epistolary exchange became then the reason why the two pictures proposed in the chapter were not good enough: both were made by painters who produced the image without a model, on the basis of the verbal description. But this complaint did not merely highlight the link (and sometimes an overreaching link) between picture and text of the treatise. It also replaced the knowledge here accumulated in its common, everyday dimension, as the mere result of everyday experience, of what it brought and of what got lost. Getting hold of things, knowing that part of the most important objects of knowledge might be lost in the course of the epistolary exchange, tainted so deeply the production of knowledge that it also surfaced in the text of the treatise.

⁵⁰⁵ *Icones Animalium* I, p 111 (ed of 1560)

The link between pictures and text, however tainted with a sense of possible loss, may explain the increasing number of letters in the successive volumes of the *History of Animals*, and especially in the *Historia Piscium*. Fishes were more difficult to access than quadrupeds, and therefore necessitated more epistolary exchange. Moreover, the mode of transport and conservation of foreign fishes (skeleton, dried fishes) made it difficult to identify them without the help of a picture and a written description. The picture itself often suffered from the state in which the model had reached the painter, and pictures that were not drawn from life might well bear less likeness to the living fish than expected.⁵⁰⁶

Letters came in to fill the gap between the real fish and the information the picture was able to convey. By quoting the eyewitness account given by his correspondents, Gessner provided the reader with elements for a precise identification that pictures could not convey. Thus, for instance, for the striking fish *rana piscis* or *piscatrix*, Gessner inserted two pictures and a letter from Georgius Fabricius, a philologist in Meissen:

This fish, whose picture painted from the skeleton was sent to me by Georg Fabricius, called *Törsch*, has, besides the head and the tail, no body, (as he himself writes it); a wide mouth, with a very prominent lower jaw. The lower jaw has only one set of very sharp teeth, the upper one is provided with three sets. From its nostrils small fins stand up and above his eyes, within its head, there is a sort of protuberance. Between the gills at the summit of his head, there are holes through which the water flows as it swims. It has no part of his body able to receive food. One could call it "*cephalicum*" (big-head). These were the words of Fabricius.⁵⁰⁷

⁵⁰⁶ See on this point Laurent Pinon, "Clématite bleue contre poissons séchés: sept lettres inédites d'Ippolito Salviani à Ulisse Aldrovandi", *Mélanges de l'Ecole Française de Rome, Italie et Méditerranée*, 114 (2002), pp. 477-492.

⁵⁰⁷ « Piscis ille cujus iconem ad sceleton Ge. Fabricius misit, nomine Törsch, praeter caput et caudam (ut ipse scribit) nihil corporis habet: os latum: et inferiore parte multum eminens. Inferior pars unum tantum ordinem dentium habet acutorum: superior triplici ordine munitur. E naribus pinnulae assurgunt et supra oculos in capite tuber quoddam est. Inter branchias concavitates in summo capite habet, per quas nanti aqua decurrit. Partes corporis alimenti capaces nullas habet. Cephalicum dixeris. Haec Fabricius. » *Historia animalium liber IV*, (Zurich: Froschauer, 1558), page 961.

The fragment of letter functioned here as a way to introduce the picture given by Gessner, and to state its exact relationship to the living fish. But this introduction was not merely an introduction: it added details about the fish the picture not shown in the picture, because it had been painted from a skeleton. While some pieces of information could be also pictorially represented – the prominent lower jaw, for instance – others were not directly and visually accessible: the sharpness of the teeth, the result of its dissection – the protuberance in its head, for instance, or, most obviously its vernacular names. In this chapter, the presence of the letter was all the more necessary because the picture sent by Georg Fabricius was placed next to another representation of the same fish, sent by an unnamed correspondent from Venice⁵⁰⁸ and to the pictures taken from Rondelet's and Belon's books on fishes.⁵⁰⁹ To put it briefly, the letter included in the text of the treatise invited the reader to look more closely at the picture, with a critical gaze, but also a gaze that would enter into the details. The letter thus gave Fabricius' image both a caption and an anchor: it commented on it, complemented it, but also told its story, its origin, and its exact weight (it was painted from a skeleton, not from life, and not from the dried fish, thus implying specific deformations).⁵¹⁰ Two years later, however, the *Nomenclator Aquatiliū animantium*, which provided a reedition of the pictures, had incorporated Fabricius' letter in the caption:

⁵⁰⁸ In the *Icones*, the caption contained criticisms of both pictures, and also questioned whether they were painted from life or from dried fishes or from the skeleton. Interestingly, the letter from Fabricius remains in the caption, reformulated and reduced to its striking and, so to speak, pictural remark on the conjunction of the head and the tail, and on the possible nickname *cephalicum*.

⁵⁰⁹ Guillaume Rondelet, *Universae aquatiliū historiae pars altera*, Lyons, Mathias Bonhomme, 1555 and Pierre Belon, *De aquatilibus libri duo*, Paris, Charles Estienne, 1553.

⁵¹⁰ The same mechanism operated in the case of the *buso* (sturgeon), painted from life by the merchant Johannes Dernschwann. This time, the addition concerned other material information: the places where the fish lived, and its prices in German fish markets. Such letters, adding details that could not be represented pictorially while anchoring the picture in the textual discourse brought in a supplementary layer of representations, both verbal and pictorial, of the animal. . "De Husone", *Historia Animalium* IV, Zurich, Froschauer, 1558, p 54.

Here is another picture painted from a skeleton: in it, some parts are without doubt distorted partly by art, partly by drying. It was sent by Georgius Fabricius, who wrote to me that, as it seems to be made up only of a head and a tail, one can call it *cephalicum*.⁵¹¹

C O R O L L A R I U M.

Rana pisc. pictura ad skeleton, quam à Misenis Ge. Fabricius misit. apparet quadam esse distorta, & ut in sceletis fieri solet, partim arte, partim ariditate, multa præter naturam speciem.

A.

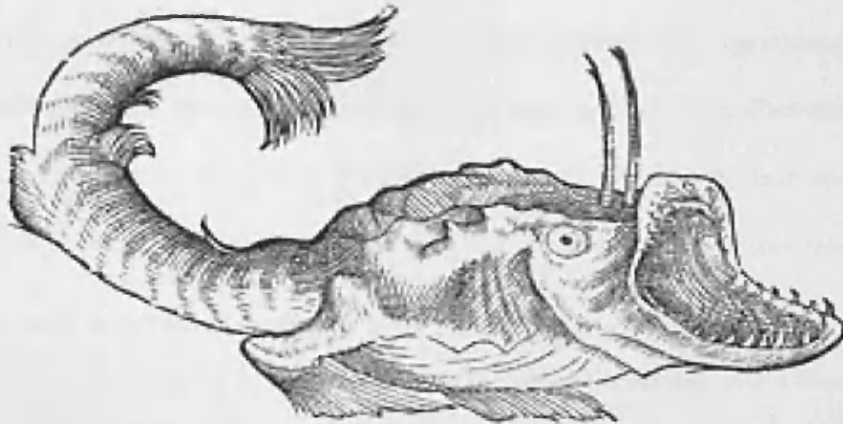


Obscuri quidam scriptores, ea quæ Aristoteles de rana lutaria seu quadrupede, & de rana marina tradidit, non satis distinguunt. Planorum piscium alterum est genus, quod pro spina cartilagineam habet, ut ratæ, torpedo: & quos bouis, aquilæ, ranæ nominibus Græci appellant, Plinius

Figure 17: *Rana Piscatrix*, *Historia Animalium liber IV* (1558), p.959

⁵¹¹ "Alia ejusdem pictura ad skeleton : in quo nimirum quaedam partim arte distorta sunt, partim ariditate, etc. Hanc misit Ge. Fabricius, qui ab eo quod capite tantum et cauda constare videatur, Cephalicum appellari posse, ad me scripsit", *Nomenclator Aquatiliū animantium, Icones animalium aquatiliū*, Zurich, Froschauer, 1560, pp. 118-119.

Alia eiusdem pictura ad skeleton: in qua nimirum quaedam partim arte distorta sunt: partim atiditas
 et, &c. Hanc mihi Ge. Fabricius, qui ab eo quod capite caurum & cauda con-
 stare videatur, Cephalurum appellari posse, ad nos scripsit.



RANA piscatrix, uel marina, aliquando simpliciter Rana, ubi scilicet de marinis sermonem
 esse constat, Plinio, Ciceroni. Graecis *καταψαλμα*, simpliciter, uel cum epitheto *θαλάσσια*, id est pi-
 scatrix: nam *θάλασσα* non placet: *θαλάσσιον* quidem dici posset, sicut & *θαλάσσιον* in Admirandis narrationis

Figure 18: Rana piscatrix, *Nomenclator Aquatilium*, (1560), p 118

Introducing witnesses: the importance of testimonies

The letter was not merely used as a supplementary caption for the picture. It also anchored it in the historical, and sometimes biographical time of the encounter with the animal, or with its representation. Whenever the picture could be questioned, it was all the more important to state its origin and, so to speak, its credentials. Gessner thus introduced his illustration of the Whale in the Addenda to the *Historia Piscium* by establishing the story of its previous circulation:

The expertly depicted whale, which was given to me by the illustrious D. Freiherr Sigismund [von Herbenstein], should be placed here. He himself had received it from Matthias Hofer, an outstanding man from Tyben, together with a description. There it is judged to be painted from a common Whale.⁵¹²

⁵¹² "Hoc in loco reponendus est Cetus, quem illustris vir D. Sigismundus Liber Baro scite depictum mihi donavit: ipse vero ab egregio viro Matthia Hofero, ex Oppido Tyben una cum descriptione acceperat. Illic a vulgo Balena existimatur." The picture follows. *Historiae Animalium liber IV*, 366-367.

The paragraph was immediately followed by the picture it captioned, and by the letter sent by Hofer to Sigismund, recording all the particulars of the capture of the animal. The letter was here completely associated with the illustration, insofar as Gessner mentioned their initial cohabitation in the envelope between Hofer and Sigismund, then between Sigismund and Gessner. But this association not only inserted the illustration in Gessner's personal biography by stating how and why he had received it, but also anchored the encounter with the animal in the historical time of the capture the letter related:

Recently (says Hofer), on Sunday night, June 1, 1555, near Pirano, in the Secovlje valley, in the Gulf of Trieste on the Adriatic Sea, a living fish was captured caught in a shoal...⁵¹³

The letter located very exactly the testimony on the foreign beast: by its precision, it became an historical fact, anchored in time and space with great accuracy. However, it did not leave much space for the expression of the eye-witness. The text was merely a list of facts, one that was integrated into another, longer catalogue with rubrics separated only by tabulation marks, and gathering the various notes which Gessner had indiscriminately taken down, based on his reading of ancient and modern authors, or on his own personal experience.⁵¹⁴ The letter remained a precise testimony, with the exact measurements of all parts of the beast indicated carefully, as well as its age, weight and the amount of oil that

⁵¹³ "Nuper (inquit Hoferus) Kalend. Junii, (die sabbati noctu) anni Domini MDLV, prope Piranum oppidum, in valle Siciolensi sinu Tergestensi Adriatici maris, deprehensus est piscis vivus in vado haerens..." *H44*, 366-367.

⁵¹⁴ This can partly explain the strange view historians commonly hold of Gessner as someone who compiled lengthy catalogues of information founded on Ancient texts and modern reports, without any critical insight. See for instance: E.W. Gudger, "The Five Great Naturalists of the Sixteenth Century: Belon, Rondelet, Salviani, Gesner and Aldrovandi: A Chapter in the History of Ichthyology.", *Isis* 22, 1934, 21-40, on page 33: "Well has he [Gessner] been called the "German Pliny"; indeed he was a polyhistor who sought to encompass all learning." Also see William B. Ashworth Jr., "Emblematic natural history of the Renaissance", in *Cultures of Natural History*, ed. N. Jardine et al., pp. 17-37. Cambridge, Cambridge University Press, 1995, for instance at page 19: "It would seem, then, that Gesner was a competent classical scholar, that he read an astonishing number of obscure books, and that he preferred ancient authority over modern. It is also apparent that, for Gesner, natural history was a discipline forged in the library with the bibliographic tools of the scholar, rather than an observational science built up by a direct personal encounter with nature."

was made out of it. The latter part of the text was devoted to a narrative about a dog that swallowed whale oil and soon died of it, which sounded very close to Gessner's own experiments with dogs.

Indeed, one of the problems early modern naturalists had to face was that individual plants and animals differed from one to another, but also over time (summer, winter, etc). Giving pictures in books thus raised questions. Letters, however, reinstalled the picture in its historical, and often, in Gessner's case, biographical context, by stating its author, discussing its condition of production, placing the picture back in the flow of exchange between two men, and often between two regions. But they remained texts: their individual character merged in the general value of the text of the treatise. Exactly at the same time as they granted the picture its historical character, they increased the general value of the text of the treatise, because they became part of a series: a series of testimonies to be assessed together, and individually.⁵¹⁵ With publication, the information became testimonies, imported into an argumentative discourse, linked to problems with pictures, or to problems

⁵¹⁵As Brian Ogilvie has recently argued, early modern naturalists were keenly aware of the problem of giving individual observations, whether textual or pictorial, a general value. However, his focus on botany does not shed light on the more step-by-step process of the elaboration of zoological knowledge: "Such vicarious descriptions, he says, seem almost like a verbal version of stop-action photography. However, they were the result of multiple observations, usually made with multiple plants in different places and times, corresponding perfectly to Dioscorides' tenet that only someone who had observed a plant at every point of its life could truly claim to know it. They were a condensation of experience. Much as the illustration was intended to represent the characters of a species, not of an individual, the description had to suppress the peculiarities of individual plants." Brian Ogilvie, *The Science of Describing*, Chicago, the University of Chicago Press, 2006, p 185. This does not, obviously, apply to Gessner's way of apprehending the knowledge of the animal as a philological operation in which he himself would engage, but also expect the reader to engage. Because they were both semi-private conversations and possibly public texts, because they offered a space, as we have seen in the preceding chapter, where the correspondents could play between the general and the particulars, letters offered a solution to the dilemma early modern naturalists were faced with. Similarly, because they were part of the text of the treatise, and because the illustration had been, when it still was a painting or an engraving, a part of the letter itself, letters established a strong tie between the text of the treatise and the illustration itself, one that placed experience in the foreground while easily encompassing the general purpose and the general form of the treatise.

of identification. Before the picture was printed, the painting, the comments, the notes, etc. were part of a collection of observations, personal but neutral. The only judgments were those made by Gessner on the quality of the picture.⁵¹⁶ Printing the picture erased, in a way, the marginal notes.⁵¹⁷ But putting them back in the text changed their status: from observations, or information, they became testimonies, taken in their historicity and, more importantly, assessed partly through the authority of their maker.

Early modern naturalists, as well as all the *studiosi naturae*, had a vested interest in the validity granted to testimonies and to witnesses.⁵¹⁸ Observations remained, in the treatise, highly personal. Not only was the author of the observation quoted and named, but also his or her credentials were carefully established. Thus, when Gessner added, to the chapter on the wolf, a savoury anecdote extracted from a letter of Justin Gobler, he explained:

Here, I cannot resist adding this remarkable history, which I learned recently from the very famous Justinus Goblerus, whose words, taken from his letter to me, are as follow: I will show you by an example, Gessner, that the captured terrestrial wolf does not attack humans. I had a stepfather called Michael, extraordinarily addicted to hunting beasts and birds, and who used, according to the custom of his region, to have some pits in his fields to capture beasts, so deep that no beast, however violent, could escape it once taken. It happened that, one night, one Sunday night, three animals, very different in nature, happened to fall into one and the same pit.⁵¹⁹

⁵¹⁶ They were nevertheless important and often followed the picture turned into an illustration up to the caption in the printed book.

⁵¹⁷ The printed pictures of plants, and most likely of animals, were stripped of the layers of comments that existed on the original painting. See for instance the edition *Historiae Plantarum Fasciculus*, Casimir Cristophorus Schmidel ed, Nuremberg, Johannes Michael Seligmannus, Fleischmannianus, 1759.

⁵¹⁸ See for instance Steven Shapin and Simon Schaffer, *Leviathan and the Air Pump. Hobbes, Boyle and the experimental life*, Princeton, Princeton University Press, 1985, and Christian Licoppe, *La formation de la pratique scientifique. Le discours de l'expérience en France et en Angleterre (1630-1820)*, Paris, La Découverte (Textes à l'appui), 1996.

⁵¹⁹ "Huic loco non possum non adscribere mirabilem historiam, quam ex clarissimo viro Justino Goblere nuper didici, cujus ex literis ad me datis verba sunt haec : Exemplo Gesnere ostendam tibi, lupum terrestrem captum non saevire in homines. Fuit mihi propatruus, Michael dictus, venationi et aucupio mire deditus, qui

The reported story obeyed the rule of *rara et nova* that made the richness of epistolary exchange. It was also told with mastery and a solid sense of suspense: Goblerus avoided naming the three animals as long as possible. A woman, and then a wolf and a fox successively fell into the pit. The woman was the main witness of the story. Goblerus insisted abundantly on her previous activities, thus justifying both her reliability and her testimony, before the fox and the wolf theatrically fell from heaven into the pit. Verbs indicating the reported speech abounded, and the circumstances of the event were very precisely detailed: diverting the reader with a pleasant story did not wipe away the rules for a good testimony. Personal observation, a precise report of the exact circumstances in which the observation took place, credentials both of the eye-witness and of the reporter were indispensable elements of the publishable and published letter.

Gessner always insisted on the status of the correspondent either regarding the whole Republic of Letters, or regarding himself. Thus, he introduced a letter and a picture of the *sagoin* with these words:

I have been sent a beautiful and exact picture of the animal commonly called *Sagoin* (perhaps from the name used by the inhabitants of Brasil, from which it has been recently imported) by Pieter van Coudenberghe, a very knowledgeable and very famous apothecary in Antwerp. I send a picture of the Sagoin, he said in his letter, painted from life and according to its exact dimensions.⁵²⁰

cum fossas aliquas in agris suis ex patrio more haberet pro capiendis feris, altas ita ut nulla bestia quamlibet violenta erumpere capta posset: accidit ut una nocte, eaque Dominica, tria animalia longe diversae naturae unam eandemque in fossam caderent”, in Conrad Gessner, “De lupo” *Historiae animalium liber I* (Zurich: Froschauer, 1551), p.721.

⁵²⁰ “Animalis quod Sagoin vulgo appellant (nomine forsan Bresiliae incolis usitato, unde nuper advectum est) iconem perpulchre et accurate expressam, Petrus Coudenbergius doctissimus celeberrimusque Antverpiae pharmacopoeus mihi communicavit. Sagoini, animalis (inquit in epistola) imaginem mitto ad vivum delineatam secundum omnes dimensiones.” Gessner then commented on the size of the picture which he had received and compared it to the size of the printed one: “(Picturae quam misit magnitudo, undique tripla fere ad nostram erat: an vero animal ipsum quam pictura exprimitur majus non sit, ignoro)” He then continued to quote the letter: “Vividum admodum erat, agile ac timidum. Pilis erat mollibus admodum. Vuis passis vescebatur Sole

Van Coudenberghé was not a physician.⁵²¹ He was an apothecary, an expert on plants and animals, with access to remote locations, plants and animals, and especially to the New World.⁵²² Gessner's praise insisted both on his erudition and on his fame. The latter was as common a qualification as the former for Gessner's printed correspondents. Johannes Boner from Balicze was illustrious,⁵²³ Justin Gobler *clarissimus*,⁵²⁴ while Anton Schneeberger was *doctissimus*, and Georgius Fabricius *egregius*.

The chapter on *silurus* and especially its second corollary "From our observations" illustrates very well this point. Eight quotes from correspondents presented descriptions of several varieties of *silurus*. This fish was, at the time, at the centre of several polemics trying to identify it with different contemporary fishes.⁵²⁵ Accumulating letters and observations,

siccatis, et pane albo modico. Coronatis hic quinquaginta diventum est, advectum ex Bresilia, forsan ex Simia parva et Mustela procreatum, miscentur; enim ibi varia animalia, propter regionis caliditatem. Nunquam de eo quicquam legi. Sic ille: nos ejus verbis et specie ipsa animalis invitati, Galeopithecum nominabimus », *Icones Animalium* f. 96. The words of Coudenberghé pushed Gessner to give the Sagoin a Greek name: still unknown in books, it deserved a name. The letter was not only used to provide details on the animal, but also to justify and legitimate the naming of it, and show that it was both necessary and accurate. I will not, in this dissertation, question the naming of things of nature. It is however a very important and interesting question, see for instance Marie-Elisabeth Boutroue, "Ne dites plus qu'elle est amarante: Remarques sur les nomenclatures botaniques de la Renaissance" in *Nouvelle Revue du XV^e siècle*, 20 (2002), 47-64.

⁵²¹ Pieter van Coudenberghé, was also one of the editors of Valerius Cordus' work and possessed a botanical garden.

⁵²² It is by the way interesting that Gessner never hesitated to quote apothecaries, gardeners, fishermen and surgeons as possible sources, and sometimes even in their own words. As shown by Florike Egmond, this was in no way a surprising practice: Carolus Clusius thus maintained close relationships and exchange with apothecaries. "Clusius and Friends: cultures of exchange in the circles of European naturalists", in *Carolus Clusius: towards a cultural history of a Renaissance naturalist*, F. Egmond and P. Hoftijzer (eds), Amsterdam, Koninklijke Nederlandse Akademie van Wetenschappen, 2007; see also Harold J. Cook, *Matters of Exchange. Commerce, Medicine, and Science in the Dutch Golden Age*, Yale University Press, 2007).

⁵²³ Johannes Boner a Balicze, *Icones Animalium*, 1560, f. 53r.

⁵²⁴ Justin Gobler in *Historia Animalium*, 1604, f. 721.

⁵²⁵ See Laurent Pinon in *Les livres de zoologie*, Chapter 7.

Gessner helped his reader to peruse several observations of this problematic fish. The first letter is introduced by these words:

As for me, I did not know up to now that a red-coloured fish existed in the Danube. Stephanus Lauraeus of Amofort, the very famous physician of Holy Roman Emperor-elect Ferdinand, thus replied pretty nearly in this way a letter of mine when I was questioning him about this fish and quoting Albertus Magnus.⁵²⁶

Following this opening sentence and Lauraeus' testimony come Sigismundus Gelenius from Bohemia, Anton Schneeberger, initially from Zurich, but living in Poland, Achilles Pirmin Gasser, a very erudite physician, Carolus Egellius, a noble physician of Ravensburg, the physician Johannes Kentmann, Benedictus Aretius, "all-round scholar and a teacher of literature in Basle, and Petrus Stubius, Gessner's "young and erudite relative". Of these eight correspondents, five were physicians, and every single one belonged to the Republic of Letters. By quoting them, Gessner not only acknowledged their contributions, but also underlined this membership in scholarly circles, which spread from them to himself.

This treatment contrasted with the one other, humbler helpers received. Thus, a fisherman quoted in the Chapter *De lucio*:

Afterwards, I learned from a fisherman in our locality that it was not rare to catch 15 pounds of *lucii* (pike) in our lake [i.e. Lake Zurich (Zürichsee)]; the fish can be sold for seven to eight drachmas per pound, they eat perches of average size; and fishermen catch them by fixing small perches to a hook with other smaller fishes; they lay eggs around the middle of March in Lake Gryphius, around the end of March in our Lake.⁵²⁷

⁵²⁶ "Ego russum piscem Danubianum hactenus cognoscere nullum potui. Stephanus Laureus Amofortius, medicus apud Ferdinandum Romanorum regem praeclarus, ad literas meas quibus de hoc pisce, enumeratis Alberti verbis, interrogaram, in hunc fere modum respondit" *Historia Animalium liber IV*, Zurich, Froschauer 1558, p 1048.

⁵²⁷ *Historia Animalium liber IV*, Zurich Froschauer, 1558, p 597. Lake Gryphius is situated south of Lake Zurich, it is apparently part of the Vierwaldstättersee.

Here, the use of indirect reported speech highlighted the difference of value given to the scholar's discourse compared to the fisherman's conversation. While the correspondent's exact words are scrupulously reproduced, including addresses to Gessner and direct speech, the rustic fisherman's words are incorporated, assimilated to the text of the treatise.

Quoting the exact words

One can, surely, attribute this distinction to the way Gessner collected his information. While he could keep the letter of his erudite friends, it is unlikely the fisherman had written him one. Rather, he had taken notes, probably in German, after having met him, just as he did for empirics or patients in his *Thesaurus Medicinae Practicae*. The choice between reporting information and directly quoting a correspondent was significant.⁵²⁸ Most contemporaries chose merely to name their informer.⁵²⁹ Rondelet himself had acknowledged Gessner's support in these terms:

We judged that our picture, sent to us by Conrad Gessner and painted from a silurus of the Yser or the Danube, is the real shape of the silurus.⁵³⁰

Naming and quoting were, however, different. First of all, quoted letters in treatises changed the status of the knowledge inserted in the text. Gessner in his desire for exact quotation kept the epistolary form. Direct addresses, apostrophes, first and second persons

⁵²⁸ The problem of authority and the criteria for giving credit, or not, to an observer may be more complex than a question of social scale. The choice between indirect reported speech and direct quotation may well be related to the question of translations. In treatises, using Latin was the rule, and the words of Gessner's German-speaking informers could not find a place, in this state, directly in the treatise. In this case, they needed a mediation that had little to do with authority.

⁵²⁹ And the degree of authority was marked by the choice of giving the informer's full name or simply his professional calling.

⁵³⁰ See Guillaume Rondelet, *Universae aquatiliū historiae pars altera*, Lyons, Mathias Bonhomme, 1555, p. 185. Other instances of similar acknowledgements can be found in many sixteenth-century authors, such as in Thevet's cosmography. I am grateful for this last reference to Frank Lestringant.

remained in the printed excerpts just as they were in the original letter. This irruption of the epistolary dialogue in the scholarly book was also highlighted by the care Gessner always took to place the dialogue in its original context. Thus, he introduced at length a letter on the habits of the salmon:

After I had finished writing these words, Ulrich Huguald, a very learned interpreter of moral Philosophy at the very famous Basle Academy, and Adam von Bodenstein, a most celebrated physician of this city, when asked about the nature of the salmon, taught me some uncommon things; for I wanted to inquire of them by letter why there was scarcely a place on the Rhine where more salmon was caught than at Basle, and above Basle from the cataract to the city of Laussenberg.⁵³¹

Here, the opening sentence reinserted the answer in the framework of the epistolary dialogue. But it was less the consequence of the practice of cut-and-paste than that of Gessner's wish to insert the letter in the text of the treatise, while keeping alive its specificities as a personal, epistolary testimony. Exactly at the same time, however, as he insisted on the epistolary quality of the testimony, he blurred the boundaries between published accounts of an animal and epistolary reports: In a book made up of cut and pasted fragments of books, letters and personal papers, the systematic use of paragraph marks to separate the various quotations, the repetition of the same formula ("*Haec*", "such a one"), the identical typography made it very difficult to distinguish at first sight what really came from letters and what was taken from published or ancient books. There was no apparent difference of status between both types of quotations: they were to be read in a similar way.

⁵³¹ « His perscriptis, Huldrycus Hugualdus, de moribus *Philosophiae* interpretes doctissimus in praeclara Basileensi Academia, et Adamus a Bodenstein medicus in eadem urbe celeberrimus, de salmonum natura rogati quaedam non vulgaria me docuerunt: ab iis enim per literas inquirere volui, quod vix alibi plures quam Basileae salmones in Rheno capiantur, supraque Basileam ad cataractam usque ad Laussenberg oppidum ... », Conrad Gessner, *Historia animalium liber IV*, Zurich: Froschauer, 1558, p.976.

Writing a treatise on plants or animals soon necessitated a philological rigour, that applied both to the transcription of the initial text and to the assessment of the reported facts, in order to elaborate knowledge. Gessner repeatedly manifested his special care for the exact formulation of his correspondent and published the text of the letter with a very minute critical apparatus. The whole narrative on the whale was thus sprinkled with italic annotations by Gessner, who translated in this manner some of the measurements, precisely located the pectoral fins, rejected an identification with Rondelet's bearded whale, and added to Hofer's assertion that the oil was made of particles so thin that it would pass through even a glass receptacle:

This seems to go beyond the boundaries of what is believable (*fides*), the part of the letter was here worn out and in the word "vitri", a letter was missing: but I could not read it differently.⁵³²

Here, Gessner began a true philological investigation of Hofer's letter: not only did he question his own reading of each word, but also he did so on the basis of the state of the paper. In a general way, his interventions in and on the text of the letter remind us of the way he was reading correspondents' epistles, and how he expected his reader to apply his mind to them: as a testimony among others, to be compared with other versions, to be thought about in terms of manuscript text and object of philological research which required careful editing: a source in all its materiality, and not just a collection of words.

But the stress on the epistolary frame of the quote also highlighted the fact that letters were the prolongation of their author, a private link between the author and his correspondent. Quoting the words of the author of the letter inserted them in a system where two authorities cohabited. On the one hand, Gessner's authority: he was responsible for the words he was publishing. On the other hand, the correspondent, author of the letter, whose words were exactly, scrupulously reproduced and had become a text which a

⁵³² *Icones Animalium*, Zurich, Froschauer, 1553, p 367.

could be subjected to philological questioning, a personal testimony and a fact in the history of the animal. This double system of authority blurred responsibilities, but it also modified the reader's position.

Anchored in direct observation, surrounded by numerous precisions concerning the date, time, place and circumstances of the encounter between man and animal, man and plant, the epistolary quote had to be assessed by the reader of the book, and not merely by Gessner. On this ambiguous role of the reader, he strongly insisted in the *Ad lectorem* of the *History of Quadrupeds*. When things seem dubious, he said:

The reader himself will have to judge, from the name of the author, how much one can believe.
As for me, I do not believe everything; I am happy to quote the words and sentences of others.
That is why I was extremely scrupulous never to forget the name of the author, even in the least important and most generally known cases.⁵³³

While the testimony given by the author of letters was not questioned a priori, it was nonetheless necessary for Gessner to give legitimacy to this foreign writing in the treatise. By integrally quoting letters, he gave the reader a hold on their veracity. Meanwhile, he imposed on his readers the same authority responsibility which he bore and moved the inquiry about nature from a mere reflexion on the contents of the letter to an assessment of the letter itself, the reported facts of the authority it emanated from, and the circumstances of its production. His philological interest in the wording of the letter thus appeared completely justified. It was necessary, in order to attain knowledge, to compare the different versions available. The inquiry about nature was partly, for the reader, an inquiry about the epistolary text, the letter an object of knowledge.

This way of writing, born of the early modern humanist habit of comparing several versions of the same text in order to establish the most exact version possible, displays several features of early modern scholarly practices: the importance of philology, (in the

⁵³³ *Ad lectorem, Historiae Animalium* I, 1551.

comparison and in the predilection for the exact word), but also it places the reader in a very surprising position. While the established texts provided by humanists (and Gessner was one, who transmitted ancient texts, especially Galen, but also others) were given in their already elaborated, or rather, compared version, what readers of books like the *History of Animals* got was not the ready-made knowledge, but a 'do-it-yourself' version of it: all the bits were there, the reader could chose.⁵³⁴

It has often been said that Gessner and his contemporaries had opted for a knowledge based on collation rather than critical inquiry.⁵³⁵ Collation, however, did not mean accepting everything. In his case, it was probably one of the most effective ways of dealing with the ocean of papers that surrounded him. Because letters were easily fragmented, easily pasted and unpasted, they offered an excellent elementary material for the elaboration of knowledge: one that was, in a way, less costly than books, and that escaped the disciplinary anchoring of books. It was easy to reproduce a letter, to index it and reuse it later, it was easy to paste it directly on pictures, in manuscript books or on personal exemplars of one's own works. Moreover, letters were texts: they fitted the main form early modern scholars knew how to give to knowledge: printed books.⁵³⁶ Finally, they were texts with an author: someone whose authority was engaged in the reporting of matters of fact, just as much as Gessner's.

⁵³⁴ This is true, at least, for the *Historia Animalium*. More polemical texts, like the *De lunariis*, used letters as testimonies, i.e. as witnesses to defend Gessner's point. Instead of being woven into the various elements of an inquest, letters became arms in Gessner's fights, elements of his argumentation.

⁵³⁵ See for instance note 515.

⁵³⁶ What I mean by that is that books were not an anodyne form, even if we find this difficult to understand: because we belong to a civilisation where knowledge has to be fitted into books. What Gessner was doing, I guess, was accommodating many sorts of knowledge to a form which had only recently become widely available.

Conclusion

In this chapter, I have attempted to understand how Gessner's material practices shaped his understanding of the knowledge of the general he was seeking.

This knowledge was not, or not merely the result of a methodical sequence of practical operations. It was born in the disorder of Gessner's study, the result of many choices owing as much to chance as to reason, it was, in a way, random knowledge.

It was also based on craftsmanship. Gessner's instinct in finding the right location for a slip of paper and his ability to pick up the right marginal title when he first read – with pen and ink – a manuscript letter counted as much as his extensive reading of anything available.

Gessner's general knowledge thus resembled his reading craftsmanship, one based on his scholastic training and on commonplace books: it aimed at discerning, in any letter, in any ancient or modern text, or picture, the heading one could and should ascribe to it; it was above all descriptive, in so far as it was based on the name of things more than on abstract concepts. Pleurisy, dropsy, aconitum or a cow were what Gessner attempted to describe in his books and in his collections of recipes. Insofar as this was what he was trying to do, he was not interested in theory, or in causes. He focused on something that was a new sort of 'general': a form of *experientia*, in the Aristotelian sense of commonplace or universally shared knowledge. However, this *experientia* was not a given, but something constructed out of the accumulation of particulars.

This general knowledge, however, could only be commonplace because it worked in a system of collaboration via letters or publications of books.⁵³⁷ On these particulars, indeed, both Gessner and his reader positioned themselves in the margins (or italics) of the text. For him, it was his own text, but the words of others. Like his reader, he had to exercise his

⁵³⁷ This point was made by Lorraine Daston, "Baconian facts, academic civility and the prehistory of objectivity." *Annals of Scholarship* 8 (1991); 337-363.

critical abilities, both his sense of philology and his own authority, in order to assess where he could put his trust, and where the testimony made sense.

Letters, in this picture, made sense, because they were “nuggets of experience”, isolated – ideally? – from theory, and also because they were personal. Actually, their isolation from theory did not matter: what counted was that they provided an intimate, personal reading of an event, an observation, a particular – particular not merely because it was rare, but because it emanated from an individual, from his own words and his own account, and therefore because the way it was told was in itself a possible object of study. Gessner placed himself and his reader on the same footing: they were both readers, and critical readers, of the epistolary text and the pictures that accompanied it, of the wording and of the spirit of the letter.

CHAPTER 7: THE HISTORY OF THE 1577 *EPISTOLAE MEDICINALES*

Introduction

Gessner's letters had another, unexpected afterlife.^{*} They were collected and printed by his heirs. But this book of medical letters, the *Epistolae medicales*⁵³⁸ published in 1577, does not amount to the correspondence of Gessner *tout court*. It is the result of a compromise between the authentic letters and the work of two men, Josias Simler and Caspar Wolf, successively editors of the book, between the requirements of a genre of medical writings and the representations of the scholar during the Renaissance.

Therefore, in this chapter I intend to write a history of a medical book, from the moment it was conceived to its realisation. Historians of science have recently turned their attention again to what the history of the book can offer to their discipline. Although a number of studies have focused on the patronage relationships revealed by luxury copies, or on the para-textual dressing up (especially the prefaces), other fields where both

^{*} Parts of this chapter have been presented to audiences in Paris, IRHT, 2004 and at the 50e Colloque International d'Etudes Humanistes, Tours, 2007.

⁵³⁸ In order to distinguish between two degrees of reading, I use the English "medical letters" when speaking of the medical genre, and the Latin *Epistolae medicales* when talking of the title of a specific book.

disciplines intertwine have been pointed out: the history of the scientific genre, the history of authorship in science, for instance.⁵³⁹

This final chapter aims to show how letters became samples of a collection and how the letters exchanged between correspondents were turned into objects of knowledge, charged with a general and universal value, and how, by printing them, their editors transformed a sheet of paper into a memorial monument to their former master.

Section 1: The birth of a book: memory and science, or the editing of Gessner's Medical letters

A strange delayed package

On 23 June 1575, a letter from Augsburg arrived at the home of Josias Simler, a Professor of Theology in Zurich. Although the communications between the two towns were good, with regular courier services, the letter (or rather the parcel) had taken more than two months to reach its destination. Dated 19 March 1575, it contained, in addition to a letter from the philologist Hieronymus Wolf (1516-1580), two bundles of letters: Conrad Gessner's correspondence with the Augsburg physicians Achilles Gasser and Adolf Occo.

As soon as he received this package, Simler wrote an acknowledgement to the senders. On 24 July 1575, he wrote to Hieronymus Wolf:

Nothing could have been these days more agreeable to me than your letter, o man of great fame, because I can see that such an excellent man as you are, in the middle of the most serious occupations, has not forgotten me, and also because you have wanted to bestow on me the honour of judging and publishing the letters of my best preceptor and friend, of blessed

⁵³⁹ See Nicholas Jardine and M. Frasca Spada, *Books and the sciences in history*, Cambridge, Cambridge University Press, 2002.

memory. Even if I have no expertise in medical questions, I will however devote my zealous effort to their publication ...⁵⁴⁰

While acknowledging the honour paid to him, and rejoicing in taking the opportunity to redeem his debt towards his friend and master Gessner, Simler nonetheless cast doubts over his ability, or rather his qualifications for handling these medical letters. Indeed, he certainly was not the most obvious person for this work. Born in 1530 near Zurich, Simler was closely involved with the political and religious institutions of the city. He was a pastor in several churches, both outside and within the town, and married successively the daughters of two of the most important men of the city, Heinrich Bullinger, his godfather, and Rudolf Gwalther. Simler studied and then taught theology: although he appears to have had some experience of mathematics as well (he published two books of astronomy), he had absolutely no knowledge of medicine. His writings range from several theological publications to studies on the Alps, but he is most widely known for his *De republica Helvetiorum libri duo* (1576). Although he was the author of several *Vitae* – not only Gessner’s but also a life of Peter Martyr Vermigli and one of Bullinger – and a good friend of Gessner (who often transmitted his salutations to his correspondents), he certainly had no experience in publishing medical texts.⁵⁴¹

⁵⁴⁰ “S. Nihil mihi hoc tempore jucundior accidere potuit tuis literis, vir clarissime, tum quod te summum virum inter gravissimas occupationes mei memoriam non abjecisse video, tum etiam quod me eo honore afficere voluisti ut iudicium et publicationem epistolarum optimi mei praeceptoris et amici sanctae memoriae ad me deferre statueris. Ego vero etsi nihil iudicii habeo in rebus medicis, tamen studium et laborem meum offero in his edendis...”, Simler to H. Wolf, 24 July 1575, UBB GII26, 68. Full text of all the letters involved in the publication are given in Appendix VII.

⁵⁴¹ Johann Wilhelm Stucki, *Vita clarissimi viri D. Josiae Simleri Tigurini*, Zurich, Froschauer, 1577 and *Biographisch-Bibliographisches Kirchen Lexikon*, Verlag Traugott Bautz, 2004. Most studies on Simler have concentrated on his works on mountains and on his *De re publica Helvetiorum*.

However, for Hieronymus Wolf, the publication of the *Vita Conradi Gesneri*⁵⁴² certainly qualified Simler for the production of a memorial work on Gessner, in spite of the amount of medical knowledge required. This choice reflects the double orientation of this publication: giving the ‘Republic of Letters’ something useful to read, and also creating a monument to his late master’s memory. As Achilles Gasser himself wrote in his reply to Simler’s letter acknowledging receipt of the package:

While I don’t ascribe to you any judgment in the medical line, you act honestly but at the same time most kindly, and many dabblers will provide such judgement for the books of our friend of blessed memory, after his death; for me however, I would rather have the thoughts of my Gessner unedited than the censure of all the doctors.⁵⁴³

Here, the whole purpose of entitling this publication *Epistolae Medicinales* appears: a scientific text, but also a memorial book of letters. Under the irony, it seems that, for Gasser and in the very particular case of letters, Simler’s lack of experience in medical matters was precisely what made him fit for the task. Because these were letters (and *lucubrationes*) and not treatises, their scientific status was different and derived from their character as an embodiment of Gessner’s thoughts. Letters were thought to retain something of their author’s quality and essence, and to be a ‘mirror’ of his soul⁵⁴⁴: they seemed therefore to be perfectly adequate for any memorial publication. Moreover, the printing of letters gave them a durable character, and inscribed their author’s – and here

⁵⁴² Josias Simler, *Vita Conradi Gesneri Tigurini. Item epistola Gesneri de libris a se editis. Et carmina complura in obitum eius conscripta*, Zürich, Froschauer, 1566.

⁵⁴³ “Cum autem nullum tibi iudicium in medica professione tribuam, ut honeste ita humanissime facis, multi et scoli in piae memoriae amici nostri libros post obitum ipsius id facient, ego Gesneri mei lucubrationes incastigatissimas omnium aliorum doctorum censurae praeferrem”, Gasser to Simler, 4 July 1575, ZBZ MsF60.39.

⁵⁴⁴ See Judith Rice Henderson “Humanist Letter Writing: Private Conversation or Public Forum?” in *Self presentation and social identification. The rhetorics and pragmatics of letter writing in early modern times*, edited by Toon van Houdt, Jan Papy, Gilbert Tournoy and Constant Matheeußen, Leuven, Leuven University Press, 2002, who summarises the history of this notion.

their addressees' and their editor's – name among those of Ancient and Modern authors. It gave them fame, eternity, and authority.

However, Simler, as well as his correspondents, soon realised that the correspondence with Augsburg was hardly enough to represent the identity of the universal scholar in which Gessner took pride. The memorialising enterprise made it necessary to expand the publication into a letter collection: he therefore set out to gather and collect letters from other aspects of the latter's correspondence network.

Collecting epistolary material: the same as collecting plants?

It was not, however, an easy task to gain access to Gessner's letters: few copies, few drafts, and many definitive losses, radical excerpting and disappearances from the untidy museum had considerably reduced the stocks. The easiest way to find them was therefore to look in the places to which they were sent. Soon after he received Hieronymus Wolf's package, Simler wrote to several of his and Gessner's mutual friends. On 12 July 1575, he sent a letter to Basle town physician Theodor Zwinger (1533-1588):

A few days ago, o famous man, were sent to me from Augsburg the letters Conrad Gessner – of blessed memory – written to the very famous physicians Doctors Occo and Gasser; and Hieronymus Wolf, a common friend of Gessner and them both, urged me to publish them. For me, there is nothing I would do more happily than both make a very erudite man happy and perform this service for Gessner, the love for whom has not been extinguished in me: that is why I would like to publish more of his letters, and not only those written to Augsburg, and the printer made the same request. That is why, when I wrote to several friends of Gessner about this, and our Wolf has done the same, it seemed that you were not the last among Gessner's friends we should ask for letters, and I ask you to make every effort to help my design. When you have the time, amid your own occupations, I would like you to collect the letters Gessner wrote to you – if you have any – which deal with some medical or related problem, and to send

them to me – I will send them back to you safe and sound; then, I would like you to obtain the same from Platter and Bauhin, and others to whom Gessner often wrote.⁵⁴⁵

By claiming a wider sphere of influence for his publication, Simler tried to convince Theodor Zwinger to offer some of Gessner's epistles. It must be kept in mind that letters were precious possessions, especially when they came from a deceased but still renowned scholar. To lose possession of them, even temporarily, was therefore no light matter: the argument stating the importance of including correspondents from various localities must have been powerful enough. Whereas Basle and Zurich were at the time within the reach of the Holy Roman Empire, they considered themselves to be free cities. There might well, therefore, have been some competition with the (rich and free) city of Augsburg. Just as Gessner had done earlier, calling for German correspondents in order to help him in his struggle with Italian botanists, Simler thus appealed to Zwinger's "patriotism". In the sixteenth-century Republic of Letters, when German and Italian scholars felt highly competitive with one another, this was certainly a clever move.⁵⁴⁶ Quoting the advice of the

⁵⁴⁵ "S.P. Superioribus diebus V.CL. Augusta ad me missae sunt Gesneri viri piaae m. epistolae ad clarissimos medicos D. Oconem et Gassarum scriptae, quas ut in publicum edam hortatur me Hieronymus Wuolfius Gesneri simul et horum amicissimus. Ego vero nihil libentius facio quam ut et viro doctissimo gratificar, et hoc officium Gesnero cujus amor nequaquam una cum ipso apud me extincta est perficiam: cuperem enim epistolas ejus plures edere, non has tantum quae Augustam scriptae sunt, et id etiam petit Typographus. Quare cum ad complures amicos Gesneri hac de causa scripserim, et idem fac[uerit] [sic] Wolphius noster, te quoque V. CL. non postremum inter amicos Gesneri de hac re per tuas interpellare visum est, te que obnixè rogo ut institutum meum adjuves. Velim autem ubi per occupations alias licuerit, te colligere, si quas habes Gesneri ad te epistolas quae aliquod [pertinens] aut medicum problema tractant, et ad me mittere, quas salvas tibi restituum: deinde idem per te impetratum cupio a Plattero et Bohino, et aliis ad quos frequenter Gesnerus scripsit (...) Tiguri 12 Julii 1575. Tui studiosissimus Josias Simlerus." Simler to Zwinger, Ms UBB FrGr MsII23, 442.

⁵⁴⁶ For a quick analysis of this patriotic and competitive spirit, see Ian MacLean, "The medical Republic of Letters before the Thirty Years War, *Intellectual History Review*, 18 (2008), p. 23. Also see Paula Findlen, "The formation of a scientific community : natural history in Sixteenth-century Italy", in *Natural Particulars, Nature and the Disciplines in the Renaissance*, A. Grafton and N. Siraisi (eds), Cambridge, The MIT Press, 1999, pp. 369-400.

printer – guaranteeing by these means the final publication of the book, and therefore that Zwinger’s name would be quoted – was an even wiser strategy.

Simler also asked Zwinger to be a go-between with other Basle physicians.⁵⁴⁷ As with any other collection, the assistance of local contacts was necessary to get access to the letters. This seems even more obvious in a letter Simler wrote a few days before to Pastor Abraham Musculus (1534-1591) in Berne, stating his love and regard for “the philosopher and physician Conrad Gessner”:

His studies were certainly different from mine, and as for these, Caspar Wolf has already published some monuments to his knowledge, and will publish still more; however, many of his other studies were of a kind that could be useful not only to those interested in medicine, but to all scholars. Of this kind are the letters he wrote to his friends, in which he discussed not only medicine, but also physics, philology and even, sometimes, theology. That is why, when recently Hieronymus Wolf, from Augsburg, sent me Gessner’s letters to the very famous physicians Drs. Gasser and Occo, with the aim that I would publish them, he had no difficulty in persuading me both to do this work and to try also to obtain more letters in other places. As Gessner was bound in a true and virtuous⁵⁴⁸ friendship with our good master Aretius, I have no doubt that one could find several letters of his worthy of being read among Aretius’ papers; that is why I am asking you with all the power at my command to attempt, if possible, to get these letters, and to send them to me. And if you can also procure other letters from Doctor Zerchinta and Doctor Poperinus, and bind them with Aretius’, you will do something extremely agreeable for me (...) And I have no doubt that you can easily procure them from Aretius’ heirs, for since foreigners have been sending letters written to themselves with such kindness, even without being asked,

⁵⁴⁷Fifteen letters to Felix Platter (1536-1614) were published in the collection. The letters from Gessner to Jean Bauhin the son (1541-1613) do not feature in the 1577 collection, but were published in 1591 in *De plantis a divinis sanctis nomen habentibus. Additae sunt Conradi Gesneri ... epistolae*, Caspar Bauhin (ed), Basle 1591, 91-163.

⁵⁴⁸ Pun here, on *areta/ aretius*

why should I not now promise myself more from our compatriots and the heirs of my great friend?⁵⁴⁹

Here again, Simler attempted to obtain access to Gessner's letters via local intermediaries. However, he made here a distinction between the letters and the medical works: the former represented the variety of interests of their author, including humanist concerns. As if creating a museum, Simler gathered items representing the various aspects of Gessner's reach and pursuits, and thus created a mosaic representation of the author, whilst trying to provide the "visitor" with information worthy of interest. By asking Musculus to obtain for him letters from the late town physician of Zurich to the Professor of Holy Scripture Benedictus Aretius, Nicolaus Zerchinta or D. Poperinus, Simler was broadening the scope of the collection, aiming at a full portrait of the man, and not merely at the establishment of knowledge.

However, he did not wish for the whole correspondence but asked for a selection of the most interesting letters:

[...] However, I am not asking you to send me all his letters, but only those which contain the explication of some thing worthy of knowledge, or some question or uncertainty expressed with erudition.⁵⁵⁰

⁵⁴⁹ "Alia quidem illius studia fuerunt diversa a nostris, et in his dedit aliqua doctrinae ejus monumenta in publicum Casparus Wolffius medicus et plura adhuc dabit: Sed fuerunt multa quoque illius studia ejus generis, ut non tantum medicis quam omnibusque studiosis utilia esse possint. In hoc genere sunt epistolae ad amicos scriptae, in quibus multa disputandi non tantum medica, sed physica quoque et philologica et nonnumquam etiam Theologica. Itaque cum nuper Vir Hieronymus Wolfius Augusta ad me mississet epistolas Gesneri ad Clarissimos medicos D. D. Gassarum et Oeconem, eo consilio ut in publicum ederent, facile mihi persuasit, ut et illum laborem subirem, et plures etiam aliunde conquirerem. Quoniam vero areta amicitia Gesnerus cum Aretio nostro b.m. conjunctus fuit, non dubito epistolas illius nonnullas lectu dignas in Aretii scriptis reperire posse: quare te summopere rogo, des operam, si fieri possit, ut illas conquiras, et ad me mittas. Quodsi alias quoque vel a D. Zerchinta, vel a D. Poperino impetraveris, et his conjunxeris, rem mihi facies gratissimam(...) Non dubito autem te facile hoc ab haeredibus Aretii impetrare posse, cum enim [externi] tam benigne epistolas ad se scriptas etiam non rogati miserint, cur nunc non plura de nostris hominibus et haeredibus amicissimi mei mihi pollicerer. » Zwinger to Musculus, 9 July 1575, UBB MsGI68, 51.

Here, Simler stated one of the main criteria applied to the preparation of the collection: the selected letters were to be “worth knowing”, “useful for the Republic of Letters”⁵⁵¹ or “dealing with some medical or related problem.” However, this scholarly or medical aim cannot be completely divorced from the epistolary support. What made the epistolary expression of Gessner’s thoughts valuable was partly the fact that they were associated with a beloved friend: therefore, the authenticity of the letters was a major concern, as Achilles Gasser stated to Simler.⁵⁵²

Meanwhile, the project of editing Gessner’s letters had become both a collecting and a collective project, involving the entire ‘Republic of Letters’, while soliciting local people in order to gain access to the letters. On 24 July 1575, in his letter to Hieronymus Wolf, Simler stated his progress:

Although I want one thing, that is to add to them other letters of Gessner, that contain philosophy and things worth knowing about, as you can find with the famous imperial physician, the doctor Crato (I have taken care to write to him, on this question, through friends) and with several other [physicians], Italian as well as German. And therefore not long ago I discussed this with the Italian physician Doctor Taddeo Duno, exactly as your letter invited me to act. I am greatly indebted to my dear Gessner, and that’s why I am delighted to have been offered the opportunity of testifying to my zeal and regard towards my deceased friend.⁵⁵³

⁵⁵⁰ “neque tamen peto, ut [omnes] illius epistolae ad me mittant, sed illarum tantum quarum explicationem alicujus rei cognitu digna, aut quaestionem et dubitationem docte propositam contineant.” UBB, MsGI68, 51.

⁵⁵¹ “Faxit Christus, ut res publica literaria boni aliquid inde tua opera capere queat” (Let it please Christ that the Republic of Letters is able to take something good from your work), Gasser to Simler, ZBZ Ms F60.39; “Sed fuerunt multa quoque illius studia ejus generis, ut non tantum medicis quam omnibusque studiosis utilia esse possint.”, “But he also studied many other things which could be useful not only to physicians, but also to all scholars”, Simler to Musculus UBB GI68.

⁵⁵² This is interesting, because it also creates a context where authenticity also gives weight (philological weight) to the knowledge created by letters, to the words of Gessner.

⁵⁵³ “quibus tamen velim rem, jungi alias quoque Gesneri epistolas quae aliquid philosophicum et [scitu] dignum continent, quales et apud CL medicum Caesarum D. Cratonem invenientur (ad quem de hac re per amicos scribi curavi) et apud nonnullos alios cum Italos tum Germanos. Neque ita dudum est quod de hac re cum D. Thaddeo Duno medico Italo verba feci, ut autem idem accurateque agere tuae me excitarunt literae.

From the existing collection, one can get an idea of the success of this approach. Although nothing substantiates the idea that Simler really achieved access to the letters by these means, and not through other channels, it seems to have been fairly effective. Although a number of solicited scholars did not provide a letter – or at least a letter that the editors included in the collection – many of them did. Simler, in his letters, made every effort to remove their apprehension: he promised to send back the letters, by an excellent messenger – as asked by Gasser in his letter to him – and seems to have had every desire to fulfil his promise. In this way, he concluded a letter to Zwinger, on 19 February 1576:

I have taken care of having Gessner's letters, which I received from you some time ago, copied, and I would have sent them back by this messenger, if I was not bed-ridden; this indeed prevented me from collecting them, since up to now they have been scattered and mixed up among other of Gessner's letters. As soon as I am better, I will take care of sending them safely back to you.⁵⁵⁴

From the exchanges between Simler and his correspondents, it seems that they considered the letters to be precious parts of Gessner's writings and works. These texts did not easily fit into a specific discipline, admittedly, but were nevertheless worth reading. Their publication was a way to erect a monument to his life and thoughts. The specificities of the epistolary form, which then (and now) were supposed, in their quality as personal writing, to retain something of the author, made it also interesting to have them gathered, as memorial objects. This practice was certainly enhanced by the growing importance of the individual, and also by the fashion for gathering objects of diverse value, in the form of

Multum debeo Gesnero meo, quare laetor mihi occasionem aliquam offerri testandi studium et observantiam meam in sancta [colenda] natura et de mortui amici memoria." Simler to H. Wolf, UBB MsGII26, 68, 24 July 1575.

⁵⁵⁴ "Gesneri Epistolas, quas a te dudum accepi, curavi describi, easque ad te per hunc nuntium remississem, nisi lecto affixus essem id enim me impediit quo minus eas colligerem dispersas adhuc inter [aliis Gesneris epistolis (sic for alias Gesneri epistolas)] permixtas: cum primum convaluero, dabo operam ut salve ad te redeant. Vale Vir Clarissime. Tiguri 19 Febr 1576." Simler to Zwinger, UBB Ms FrGrMsII26, 365.

a cabinet of curiosities. Simler applied to the collecting of letters the same techniques as Gessner used when he was gathering plants, recipes or stories. While the letters might have been preserved for their scientific contents or for the personal link to a lost friend they represented, their gathering for publication made them into both memorial testimonies and objects of knowledge. Both qualities made them suitable for publication in this new ‘Gessner museum’.

The editor is dead, long live the editor!

Publication, however, was no straightforward process: Simler’s job was not limited to the gathering and careful copying of Gessner’s autograph letters.

By the end of February 1576, Simler seems to have already gone a long way towards completing his project. A letter from another correspondent featuring in the collection, Johannes Funck, dated 25 May 1576, even asked if the letters had already been sent to the printer.⁵⁵⁵

However, on 2 July 1576, Simler died. In the next year, Christoph Froschauer published *Epistolarum Medicinalium Conradi Gesneri libri III*, edited by town physician Caspar Wolf. No mention was made of Simler on the title page; and although the first page of the preface praised his work, it clearly minimised Simler’s role in the process.⁵⁵⁶ Instead, Caspar Wolf’s name and signature introduced the work to the reader.

⁵⁵⁵ Funck to Simler, 25.05.1576, ZBZ MsF60.27.

⁵⁵⁶ It is not possible to establish whether Wolf or Simler should be held responsible for the edition: while Simler clearly is at the origin of the edition and of the project, he does not appear to have significantly altered the letters he wanted to publish. There is evidence to the contrary, as he received a letter from Gasser encouraging him not to modify or correct Gessner’s text. Meanwhile, among the remaining manuscript letters, many have been annotated by Wolf, and others even clearly prepared for edition, with large red-pencil strikethroughs. Wolf also stated in his Preface that Simler had only prepared one book, but does not say whether it was the first one (only 3 correspondents). Anyway, this is doubtful, as Simler himself wrote to

Caspar Wolf, the new editor of the letters, was born in 1532 in Zurich and, like Simler, counted among Gessner's closest disciples. He was his heir in every way. First, he had replaced his former teacher in the prestigious position of town physician of Zurich, a responsibility that attested to his medical abilities. Moreover, he had also inherited Gessner's lectures on *Physica*, where he could demonstrate further his theoretical skills. Lastly, Gessner had left his medical and scientific papers to him, with the provision that he should publish his *Historia Stirpium* posthumously.⁵⁵⁷ Although the scholarly community was still waiting for this chef-d'oeuvre,⁵⁵⁸ he had already published, in 1577, two minor texts, a translation of *Moschion* and the second part of the very successful *Thesaurus Evonymi Philatri*.⁵⁵⁹ He also was famous for his gynaecological writings. The publication of the *Epistolae Medicinales* belonged to this thread of activity, one that allied ready-made material and the desire to perpetuate the master's memory.

many of the correspondents of the third book, and as the letters to Occo, that form the second book, were the first to be in Simler's possession, and must therefore have been transcribed early!

⁵⁵⁷ See Caspar Wolf's letter appended to Simler, *Vita ... Conradi Gesneri*, Zurich, Froschauer, 1566, ff. 42r-v.

⁵⁵⁸ And it appears that Gessner's friends were not completely happy with Caspar Wolf's publications of (or, in some case, failure to publish) Gessner's works. See Simler's letters to Musculus (see below, comments on Aretius' heirs and Simler's compatriots) and to Hieronymus Wolf ("Velim quidem Gasparum Wolphium qui bibliothecam ejus possidet, monumenta quaedam doctrinae illius, qualia non pauca habet, in publicum edere, sed quia ille procrastinatione quadam in [his] utitur, vel propter negotia, vel quod non tam ut Gesnerus laboriosus sit, spero tum meam tum aliorum in simili studio operam studiosis non ingraturam fore." Gessner's letter to Simler also seems a critique of Wolf.

⁵⁵⁹ *ΜΟΣΧΙΩΝΟΣ ΠΕΡΙ ΓΥΝΑΙΚΕΙΩΝ ΠΑΘΩΝ* id est, *Moschionis medici Graeci de morbis muliebribus liber unus: cum Conradi Gesneri viri clariss. Scholiis et emendationibus, nunc primum editus opera atque studio Caspari Vuolphii Tigurini medici*, Basle, Thomas Guarin, 1566 and *Euonymus, sive de Remediis secretiis, pars secunda: nunc primum operam et studio Caspari Vuolphii Medici, Physici Tigurini, in lucem editus*, Zurich, Froschauer, 1569.

Section 2. From Gessner's letters to Gessner's *Epistolae medicales*

Authenticity of the letters and requirements of the genre

Both these desires – that of making available material which would otherwise be lost to knowledge and that of building a memorial to Gessner – were easily perceptible in Wolf's Preface to the 1577 volume. In an apology which nonetheless let transpire a certain discomfort regarding the material he was publishing, Gessner's heir insisted on what, according to him, made publishing these letters a necessity.

First of all, they discussed a variety of subjects “fitted to restore the mind with an agreeable and sweet admiration, as when in the theatre of the universe, one can see in one glimpse the myriad things of Nature, of Philosophy, of Medicine, of Ethics, of Grammar explained and illustrated.”⁵⁶⁰ This variety, which could be a dubious quality insofar as it prohibited any long dissertation on a single subject, was counteracted by a sound medical contribution. The correspondence was, he said, “full of important insights into the Method and into the knowledge, composition and use of medicaments.” But the book was not merely a receptacle for Gessner's knowledge. It was all written in a simple, understandable language, which made the book a worthy pedagogical tool, as the metaphor of the theatre hints at.⁵⁶¹ This simplicity was clearly the best token of his own personality, and of the authenticity of the letters:

⁵⁶⁰ “Epistola dedicatoria”, *Ep. Med.*, sig. α3r.

⁵⁶¹ This allusion to the numerous contemporaneous publications of *Theatres of knowledge* highlights the scientific aim of the collection, as well as the universal quality of Gessner's letters. It would be interesting to follow this track and this metaphor more in depth.

Just as in everyday conversation he was not accustomed to hunt or hurry while speaking, so he was in writing, and he was not overly affected, nor did he pursue the painted harlotry of words, as if he understood that it was the marrow, not the bark that nourished.⁵⁶²

Letters were, as I have already said, seen as a mirror of the self. But here, what Wolf proposed to the reader of the 1577 collection was also the “marrow” of Gessner’s knowledge, under a disguise of pleasant and well-written letters. Publishing the book under the title of *Epistolae Medicinales* guaranteed them a ready audience while framing them into a genre that increasingly involved both qualities. It was no longer Gessner’s correspondence: it became Gessner’s *Epistolae Medicinales*.

A fashionable scientific and medical genre

This genre was, in fact, quite a new fashion. Launched in 1521 by the Italian physician Giovanni Manardi, the *Epistolae Medicinales* had immediately met with an impressive success. Over 58 editions and reeditions bore this title in the sixteenth century, and represented a considerable part, as we shall see, of the medical publications of the time. It soon became one of the most important vessels of, and forms given to, early modern medical knowledge.

However successful the genre may have been in the 16th and 17th century,⁵⁶³ it received, to the best of my knowledge, attention only recently. Ian Maclean, in “The Medical Republic of Letters before the Thirty Years War”, proposes a detailed analysis of

⁵⁶² « Ut enim in quotidiano sermone verba neque aucupari, neque praecipitare solebat, ita in scribendo, neque nimis affectatus erat, neque verborum fucata lenocinia est sequutus, utpote, intelligens, non corticem, sed medullam esse, quae nutriat. » Epistola dedicatoria, *Ep. Med.*, sig. α3r.

⁵⁶³ In his paper, Maclean gives a list of the publications of medical letters between 1521 and 1626. For the purpose of illustrating my claims, Appendix VI presents a slightly more complete, although still provisional list of 16th-century publications of *Medical letters*, by chronological order, including reeditions and reemissions. See Ian Maclean, “The Medical Republic of Letters before the Thirty Years War”, *Intellectual History Review*, 18 (2008), pp. 15-30.

the general features of the genre, a genre that he considers as one of the regulators of relationships within the Republic of Letters. Otherwise, the lasting interest of early modern physicians and scholars in *Epistolae medicales* as medical books has been almost completely ignored, in spite of the ever increasing number of editions of *Epistolae Medicales* well into the 17th and even the 18th century.⁵⁶⁴ Several historians have tried to establish the specificities of particular genres, with particular reference to their relationship with theory and with practice.⁵⁶⁵ This type of research is generally based on the understanding of medical writing as being positioned on a linear scale, one end of which represents theory and the other practice. However, texts like the *Medical Letters* cannot be characterised only by their respective 'distance' from each end of such a scale.⁵⁶⁶ First of all, because *Epistolae Medicales* were, from the start, based upon a pretence of authenticity, upon their being, or at least mimicking, an everyday medical practice. A number of them were dated, and many more mentioned the name of the patient, his quality and function. Some even included the initial consultation written by the patient.

At the same time, the genre was inscribed in a far-reaching tradition. According to its first early modern defender, Giovanni Mainardi, the genre of the *Epistolae Medicales* was

⁵⁶⁴ However, some steps have been made in this direction by Vivian Nutton, in "Books, printing and medicine in the Renaissance", *Medicina nei Secoli* 17, 2005, 421-442 or in his introduction to *Medicine at the courts of Europe (1500-1837)*, London, 1989, or by Daniela Mugnai Carrara "Per lo studio degli *Epistolarum medicinalium libri XX* di Giovanni Mainardi", *Medicina nei Secoli* 17, (2005), pp. 363-381. See also Gianna Pomata, "Praxis Historialis: The Uses of *Historia* in Early Modern Medicine," 2005, pp. 105-146.

⁵⁶⁵ See Andrew Wear, "Explorations in Renaissance writings on the practice of medicine", in *The medical Renaissance of the sixteenth century*, A. Wear, R.K. French and I. M. Lonie (Eds), Cambridge, New York, Cambridge University Press, 1985, p 118-145; Brian Nance, *Turquet de Mayerne as Baroque Physician. The Art of Medical Portraiture*, Editions Rodopi, Amsterdam, New York, 2001, Katharina Huber, *Felix Platter "Observationes". Studien zum frühneuzeitlichen Gesundheitswesen in Basel*, 2003, Ann Blair, "The problemata as a natural philosophical Genre", 1999; J. Agrimi and C. Crisciani *Les Consilia Medicaux*, 1994; Marina Frasca-Spada and Nick Jardine, *Books and the sciences in history*, Cambridge, Cambridge University Press, 2000.

⁵⁶⁶ Since the aim of this chapter is to establish the features of the genre when Gessner's *Epistolae medicales* were published, I am focusing on sixteenth-century publications.

already ancient; it redefined the medieval *consilia*, and proposed another sort of epistolary medical knowledge.⁵⁶⁷ Indeed, Manardi's medical epistles often resemble *consilia*. The pretence of a real exchange was often barely kept, and the aim of the correspondence seems to be to present a list of remedies and possible courses of actions for a specific disease, rather than for a specific case.

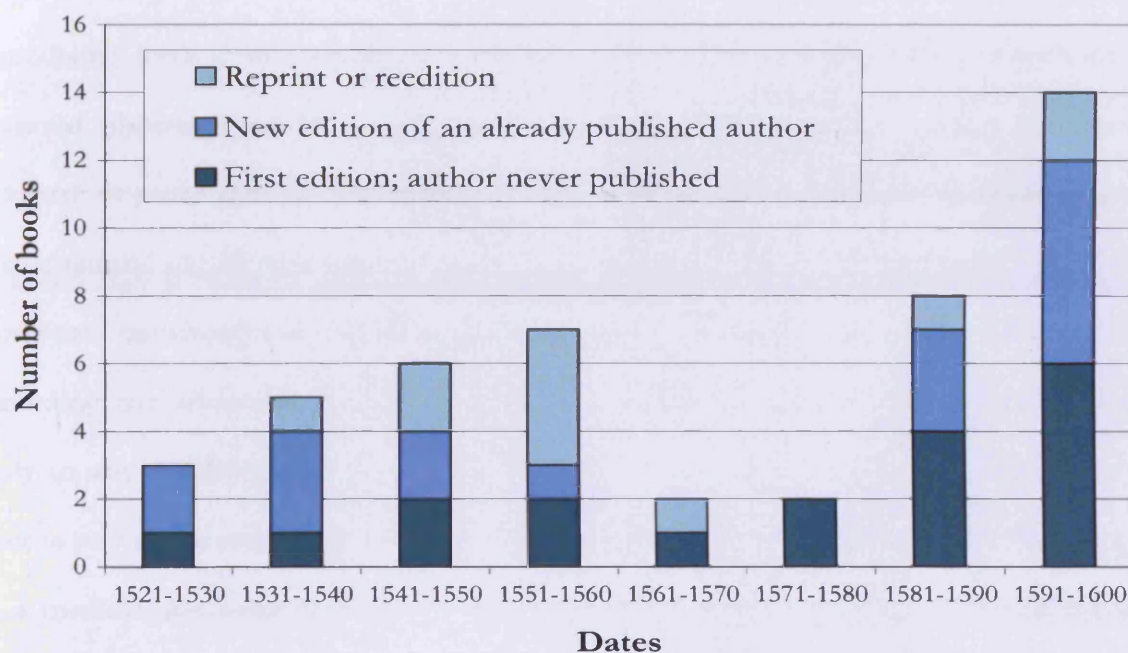


Figure 19: Editions and reeditions of Medical Letters

Obviously, this approach did not fit very well Gessner's model of letters, or even of consultations by letter. His letters were published and prepared at a moment when the genre seemed to have frozen, and essentially consisted into the reeditions of the productions of the same five authors. The letters of Manardi, Nicolaus Massa, Luigi Mundella, Johannes Lange and Johannes Batista Theodosius were commented upon,

⁵⁶⁷ "Modus autem hic scribendi per epistolas, praeter id, quod vitari vix potest, interpellantibus amicis, non est novus. Archigenes, Galeno teste, undecim libros Epistolarum medicinalium scripsit et Themison, Paulo teste, decem. Consilia etiam a recentioribus vocata, non aliud certe sunt, quam epistolae." Giovanni Manardi, *Epistolae Medicinales libri XX*, I, 1, Venice, Petrus Schoeffer, 1542, p.3.

reprinted and resold, with addenda, several times before 1556-1557. After this date, collections of letters themselves began to be collected. In 1556, a joint folio publication in Lyons, not to say an anthology, indexed together the various existing books entitled *Epistolae Medicinales*.

This anthology helped to standardise the genre not only as the preserve of five authors, but also as an editorial space for knowledge. The folio edition made them immediately look more authoritative and scholarly.⁵⁶⁸ This first generation of authors often favoured 'philosophical' letters. The letter was centred on one subject, either the treatment of a case or more general considerations on a disease; sometimes they focused on the use of one natural object (stones, for example, or plants). However, this epistolary form seems sometimes contrived: the first part, stating the reasons for the existence of the letter, and reminding the addressee of the circumstances surrounding the writing, does not often apply to any real-life "correspondence exchange" as in Gessner's letters. More often, the letter is provoked, somewhat artificially, and the epistolary form appears as a form imposed on a medical discourse, and not as the reflection of a real exchange of information and views.

Gessner himself did not refrain from publishing one of these philosophical letters in the course of his controversy with Mattioli: the preface states how contrived the letter was, and how he was asked to produce a letter in order to answer Guilandinus and therefore Mattioli. The epistolary form seems a cover for other forms of medical discourse: disputations and controversies as well as short treatises. Besides, the books of *Epistolae Medicinales* strongly stressed the knowledge which the letter contained. For instance, most letters bear a title summarising their theme. Not only was the title helpful for the reader,

⁵⁶⁸ See Ian Maclean, "The medical Republic of Letters before the Thirty Years War", 2008, p.21.

but it also facilitated the indexing process.⁵⁶⁹ From the beginning, indexes in the books of *Epistolae Medicinales* were widely used and advertised on the title page.

By contrast with Simler and Wolf's aims when beginning the project, four of the five traditional authors of the genre do not display any memorial aim.⁵⁷⁰ Mattioli's two volumes of *Epistolae Medicinales* certainly inserted more of their author's personal background for their author. Conceived as a series of apologies with a clearly polemical dimension, mostly dealing with the controversies provoked by Mattioli's botanical publications, both the volumes were awaited with great impatience by the scientific community.⁵⁷¹ Gessner thus asked his correspondents several times whether they knew of their publication date. The absence of new publications and new authors does not signify that people had stopped reading the existing collections. As I have earlier underlined, he himself possessed several collections of *Epistolae Medicinales*, read and annotated them carefully. It must be remembered that in his letter to Zwinger, Simler mentioned the agreement of the printer, even though he was writing within a few days of the beginning of the project. The publications of correspondence were then benefiting from a large and eager readership. As Cecil Clough has written, letter books were really a fashion.⁵⁷² Froschauer must indeed have rushed to print on this occasion, and, while his fidelity to the memory of one of his greatest authors cannot be questioned, the prospect of another lucrative edition cannot have been absent from his calculations. Following the publication of Gessner's letters several other

⁵⁶⁹ See Ann Blair, "Reading Strategies for Coping With Information Overload ca.1550-1700", *Journal of the History of Ideas*, 64, 1 (2003), 11-28.

⁵⁷⁰ Although Theodosius' letters were prepared by his son, although without any explicit memorial intention.

⁵⁷¹ In 1555, Taddeus Dunus also published a book of *Epistolae Medicinales*. It was reprinted in 1592, with additional letters.

⁵⁷² Cecil H. Clough, "The Cult of Antiquity: letters and letter collection", in Cecil H. Clough, *Cultural aspects of the Italian Renaissance, essays in honour of Paul Oskar Kristeller*, New York, Manchester University Press, 1976.

books of *Medical Letters* were printed in Zurich, and the city became one of the most important centres of publication for the genre.⁵⁷³

Publishing the 1577 collection thus inserted Gessner's letters in a fashionable, but also predictable editorial genre. Readers were expecting a certain kind of knowledge out of it. As we shall see, the editors' work attempted to fit the letters into this framework, thus redefining both his persona and the status of the knowledge initially circulated and now contained in his letters.

Selecting the letters and organising the collection

If Caspar Wolf used to employ ready-made material in order to prepare his books and those of the late Gessner, dealing with his master's letters could be tricky. In fact, this material was relatively heterogeneous: manuscript letters collected from former correspondents, letters he had preserved, drafted, copied, and kept because of their scientific interest or their polemical status.⁵⁷⁴

Although our analyses can be based on only a few letters, it is possible to get an idea of the editorial choices presiding over the collection's destiny by examining Gessner's correspondence with Johannes Fabricius Montanus, a pastor in Chur.

⁵⁷³ Gessner appears as one of the first new authors in a changing picture. For a quick survey of the evolution of the genre, see Appendix VI. After the 1577 collection, a fourth book of *Medical letters* appeared in 1584, containing the letters he wrote to Johannes Kentmann. In 1591, the correspondence with Jean Bauhin followed the latter's *Complete works*. None of these publications was reprinted in the early modern period.

⁵⁷⁴ Many examples of the last two kinds of letters may be found in the Zurich Zentralbibliothek. Some of them also bear annotations in the hand of Wolf, and were therefore clearly among his possessions, although there is nothing to confirm that he had them before 1577. I was able to locate only a few manuscript versions of the letters of Gessner which got into print. They were (except for a small number) obviously sent back to their addressee, as promised in some of Simler's letters, and then lost. For instance, Gessner's correspondence with Basle scholars (Felix Platter, Theodor Zwinger and Johannes Hospinianus) is now completely lost as far as it has been possible to determine. It is therefore extremely difficult to establish with certainty which letters the editors had at their disposal to choose from and their criteria for so doing.

Born into a Zurich family and himself a former student of Gessner, Fabricius exchanged a large correspondence with his master, at least between 1553 and 1564. Fourteen of Gessner's letters were published in the third book of *Epistolae Medicinales* in 1577. Two still exist in manuscript form, and are in Zurich, along with ten others. Wolf has annotated some. As Fabricius Montanus was originally from Zurich, and as his family had remained established there, it is likely that after his death from the plague in 1566, his papers went back to Zurich and were therefore at the editors' disposal. They constitute a large enough corpus, with evidence of Wolf's handling, to cast some light on the editor's motives and aims. This can be done by observing the differences between the selected and the rejected letters to Fabricius.

The first, and most obvious choice made by the editors, consisted in selecting the letters dealing with medical or botanical matters. However, while Gessner mentions fifty plants and several other natural objects, such as sulphur or nitre in the fourteen letters selected for publication, he mentions more than forty plants in the remaining ten manuscript letters: the quantity of relevant material was obviously not the sole criterion. In fact, the huge number of plant samples mentioned in the manuscript letters is partly due to long lists of references to the dispatch and receipt of plants, while the selected letters usually examine the plant more thoroughly, or provide a range of synonyms:

Of the three plants you sent, the first one takes its common name from gold and is the *Polium*, or a species of *Polium*, and is used by physicians and apothecaries as a replacement for true *Polium*. Ours buy in Lyons another species, closer to Dioscorides' description. But both are two species of the same genus. It grows around here quite abundantly, but only in one place, and in a restricted habitat.⁵⁷⁵

The average entry for plants in unselected letters would rather look like:

⁵⁷⁵ Letter from Gessner to Fabricius, 4th June, *Ep. Med.*, f. 93r.

2. Flower of *sedum montanum*: I will send the plant itself back, if the occasion occurs, I hope, with its root.⁵⁷⁶

The unselected letters seem to contain less information than the selected ones.⁵⁷⁷ They were shorter, and mostly aimed at providing the correspondent with a list of Gessner's demands. Wolf also privileged letters containing information about a wide range of subjects: thermal springs, for example, but also medical treatments, and especially recipes, for specific diseases such as gout, kidney stones, and one *consilium* against worms. This led to a much stronger presence of medical questions in the selected letters, than in the others. In the rejected letters, Gessner's mentions of diseases ordinarily came down to reports on the health of family members or friends. It thus seems that the editor rejected letters which gave simply news of the political or religious situation in Zurich and in foreign countries. A "medical letter" according to Wolf, could therefore not be reduced to a letter between physicians: it must deal with medical questions.

Furthermore, the complete absence of letters from Fabricius in the book placed Gessner at the central point of the exchange, and slightly erased the dialogic dimension of the correspondence.⁵⁷⁸ The collected letters were not a memorial to the whole community, but to Gessner as its centre.

This memorial to Gessner as a scholar attempted to obliterate any deviation from the norm, however minor. For instance, letters mentioning the success of a barber in curing an

⁵⁷⁶“ 2. Flos sedi montani: cujus plantam ipsam revertem, si forte olim occasio fuerit, opto, cum sua radice” ZBZMSC50a37, Letter from Gessner to Fabricius, 18 July 1559.

⁵⁷⁷ The nature of the information obviously depended of Wolf's own preoccupations: with medicine, with natural history.

⁵⁷⁸ Only 3 letters among the 209 of the collection are addressed to him; one from Adolf Occo and one from Achilles Gasser, who both were the first to send their correspondence to Simler, and therefore received what might be an honorific quotation, and the third one is a honorific letter sent by a son of Julius Caesar Scaliger, and introduced Gessner's answer. But except for this last instance, none of these letters belonged to a dialogue with Gessner: everything comes from him.

illness of Mrs. Gessner are not kept. He was not an acceptable source of therapy, especially on an occasion where himself had been asking so many of his colleagues for help. It is significant that some of these letters to fellow physicians were included in the publication. Divergences from the scholarly ethos were no longer acceptable: the differences between the books treated in the published and unpublished letters are revealing. While the published letters mentioned mostly books written by Gessner, or by ancient authors (Galen or Dioscorides), the books and manuscripts quoted in the rejected letters were much more varied: a book of Joannes Magnus Grossus, archbishop of Uppsala, on *Gothorum Sueonumque morum historia in 24 libros redacta*,⁵⁷⁹ a book by the astrologer and mathematician John Dee, one on medical and thermal springs by Friedrich von Salis, a correspondent of Fabricius, and another about David Joris (1501-1556) entitled *Haeresiarchae historia*.

This technique of presenting a narrower, more humanistic picture of Gessner's interests, and thereby of insisting on his own authority and on that of the Ancients is also apparent when one examines the authors cited in the letters. While the printed letters mentioned the names of the greatest authorities in natural history and medicine – Galen, Aristotle, Dioscorides and Theophrastus – only Dioscorides was named in the rejected letters. Other authors were closer to Gessner's time: John Dee,⁵⁸⁰ Friedrich von Salis,⁵⁸¹

⁵⁷⁹ Johannes Magnus, *Gothorum Sueonumque historia, ex probatis antiquorum monumentis collecta et in XXIV libros redacta*..., Basle, Isengrin, 1558.

⁵⁸⁰ The book by John Dee apparently had a complex history, as it was lost by the English scholar during his trip to Switzerland, recovered by Johannes Fabricius Montanus and sent back to Dee via Gessner, Froschauer and the Frankfurt fairs (ZBZ MsC50a 43.1 and 43.2, letters dated 16 July, s.a. and 6 August 1563.) Gesner mentions it as well in the end of the entry for John Dee in the *Liber amicorum* (LA 173, 23 April 1563, followed by a postscript on 13 July 1563, as a "libellus de secretioribus quibusdam naturae virtutibus." It is probably the *Προπαιδέυματα ἀφοριστικά*, *de praestantioribus quibusdam naturae virtutibus, ad Gerardum Mercatorem*, London, Henry Sutton, at the expense of Thomas England, 1558.

⁵⁸¹ Friedrich von Salis (1512-1570) was a major figure of the Reformation in the Graubünden. A public servant, his studies in Basle and religious activities helped him establish links with all the most important Reformers of the time, including Bullinger. I have not been able to identify this book, mentioned in ZBZ MsC50a25.2, 3 December 1557. It dealt with thermal waters.

Johannes Magnus, but also Hieronymus Tragus and Vesalius. And some of the books exchanged even concerned everyday scandal in reformed Swiss communities: Gessner thus circulated with the utmost diligence a printed pamphlet summarising the life of David Joris (David Georg), a Dutch Anabaptist, hidden in Basle under a false identity, and finally discovered as such three years after his death.⁵⁸² For Fabricius, in his faraway location, such news may have seem extremely spicy: later however, they were unacceptable in a published edition of Gessner's letters.

Similarly, the variety of correspondents and friends named in the rejected letters is much greater: twelve in the fourteen printed letters, against twenty-five in the ten rejected ones. These names of friends were mostly those of local people, in Zurich and in Chur, in the first case, but the rejected letters contained a much greater variety of origins. A last category of names in the letters was formed by political and diplomatic dignitaries: the French ambassador in the printed letters, the French king and the Dukes of Brunswick, as well as the Landgrave of Swabia, and a bishop. As stated before, the letters dealing with political and religious problems were almost systematically rejected. Does that mean that the worldly side of Gessner, his interest in what happened around him, his political and social gossip was not worthy of admiration, and therefore of publication? Have we here one of the cases described by Gadi Algazi in "Food for thought",⁵⁸³ when the scholar has to forget everything about the world, because he is too much engrossed in his studies? While it certainly corresponded to a reality – the letters often resembled a rough draft – it was also much more acceptable than a too worldly interest in common events and in the

⁵⁸² The pamphlet regarding David Joris' story, certainly one of the greatest scandals in Basle, may be *David Gerogen auß Holland deß Ertzkätzers warhafftige histori seines lebens unnd verfüllirschen leer von der zyt an alß er gon Basel is kúmen doseß geávt und waß sich nach seinem absterben mitt jm und seinen verwandete alda veroffen bat*, Basle, Hieronymus Curio, 1559.

⁵⁸³ Gadi Algazi "Food for Thought: Hieronymus Wolf grapples with the scholarly habitus," in: *Egodocuments in History: Autobiographical Writing in its Social Context since the Middle Ages*, Rudolf Dekker (ed), Hilversum, Verloren, 2002, pp. 21-44.

destinies of the ‘great and the good’. The scholar, from what one can deduce from the choices made by Wolf among the letters to Fabricius, had to be a serious man, engrossed in his studies. That might be why Gessner’s printed letters are full of seriousness, and show very little jocularity. One would hardly be surprised, therefore, at the suppression of a letter concerning exchanges of jokes between the correspondents: “I’m sending a funny story, with an epigram by D. Castelveticus, a very elegant poet” disappeared.⁵⁸⁴

It appears, therefore, that in selecting the letters suitable for print Wolf mostly chose them according to social criteria and representations of the scholar in the sixteenth century. A proper physician had to be a virtuous man, hard working and devoted to his studies; he had to be a learned man, mastering ancient texts and ancient languages.⁵⁸⁵ In contrast, Gessner’s taste for jokes – even literarily expressed – and his interest in information seem to have been toned down, as was the friendly regard with which he apparently entertained medical men of lower status, such as the barber Jacobus.⁵⁸⁶ These erasures must lead us to question the silences of the collection.

The 1577 collection presents 209 letters, among which 206 are from Gessner. This represents, obviously, only a small part of the manuscript letters available in Zurich.⁵⁸⁷ What aspects of Gessner did Wolf choose not to advertise?

He refrained from publishing, for instance, the letters written in a controversial context. Except for two letters to Leonhardt Fuchs, both of which expressed threatening

⁵⁸⁴ Gessner to Fabricius Montanus, 23.10.1562, ZBZ MsC50a41.2. “Mitto historiam facetam cum epigrammata d. Castelveticus, elegantissimi poetae [...]”

⁵⁸⁵ Although Gessner occasionally wrote in German, all letters in the collection are in Latin, or in Greek, and one of them mentions letters in Hebrew. Vernacular languages are limited to names of plants and animals, whereas many of the manuscript letters have postscripts in German.

⁵⁸⁶ Letter from Gessner to Fabricius, 6 February 1562, ZBZ MsC50a41.2.

⁵⁸⁷ Besides the possible losses, the *Thesaurus Medicinæ Practicae* offers full proof that choices were made by Wolf.

intentions from Gessner in a very friendly and ‘Republic of Letters’ way,⁵⁸⁸ the controversial letters we can now find in the archives, and which Wolf most certainly had already in his hands, do not appear in the 1577 collection. The most striking example is perhaps the letters exchanged with Pietrandrea Mattioli and Girolamo Donzellini: Wolf decided not to publish them in order to avoid soiling Gessner’s unquarrelsome image (as he said in his preface).⁵⁸⁹ Therefore, it was possible to publish controversial letters, as long as they were not openly aggressive.

Also strangely absent from the printed collection is the position of Gessner as Zurich *archiater*. The letters to the town council, stating his requirements for exercising his duties, were not published by Wolf, nor were the letters he wrote to the *Wundgschau* about cases of leprosy.⁵⁹⁰ The absence of signatures including Gessner’s title of Stadtarzt contributed to this effect.

However, Wolf himself succeeded to Gessner’s position as an *archiater*. It was a prestigious achievement: in a letter to Adolf Occo, Gessner congratulated him on his nomination to a similar position in Augsburg.⁵⁹¹ Why such a distance, then, from the institutional anchorage of Gessner in Zurich? Was it for fear of neutralising the universal value of the medical contents of the letters by giving it too temporal a context? Would presenting Gessner in an excessively local context have been less interesting than insisting

⁵⁸⁸ See both letters to Fuchs in *Ep. Med.*, ff. 137v-139r. These letters are extremely interesting because, under the cover of a very affectionate civility, Gessner threatens Fuchs with a competing publication on plants if he does not comply with his request to share pictures with him.

⁵⁸⁹ “At quoniam Gesnerus, sui quasi in iis oblitus, paulo est vehementior: nec praeterea adversariorum doctas licet et modestas responsiones, addere integrum esset, cum de eorum voluntate non constitisset: satius existimavi, simul omnes ad tempus suppressere, quam doctorum virorum existimationem offendere.” in *Ep. Med.*, Preface, sign. α4r.

⁵⁹⁰ See Bernhart Paul Baumgarnter, *Texte zur Zuercher Wundgschau von 1534 bis 1654*, Juris Druck + Verlag Dietikon, 1997.

⁵⁹¹ An idea of the prestige of the position can be gathered from Vivian Nutton’s introduction to *Renaissance Studies*, vol 15.2 (2001), “Medicine in the Renaissance City”.

on the breadth of his reach? It should also be noted that, whereas the collection contains several letters to inhabitants of Zurich, this local dimension is somewhat realigned by the selection of letters to students, then on a trip to various European universities (Geneva, Montpellier, Tübingen or Basle). And, the fact that two of the correspondents in the collection lived in Zurich is made totally obscure. The first one, Taddeo Duno, a physician from Locarno, who immigrated to Zurich for religious motives in 1555, is still addressed as a “Locarnensis”. And the Zurich physician Johannes Placotomus is simply called a *medicus*, without mention of his origin, in contrast with the normal usage of the collection. Therefore, it seems that Wolf has attempted to obliterate the local anchorage of Gessner, and to promote a more international and wider-reaching image of his predecessor.

The organisation of the collection follows the same principles. It gives a reflected image of the scientific community surrounding Gessner, conforming to the requirements of the ‘Republic of Letters’, and especially of the ‘Republic of physicians.’⁵⁹²

Organised in three books, the volume gives more weight to the first four correspondents, grouped in the first two books, while the third book includes letters to and from twenty-five scholars. The grouping of three court physicians as well as the isolation of Occo in the second book shows how important Gessner’s relationships were. These four men also represent most of his German network, with the exception of the letters to Fuchs at the end of the third book; they also embody most of his intercourse with very powerful physicians, mostly known for their medical achievements. Although Gessner was a town physician, and only once came to Court, the first two books highlight the fact that he was acknowledged and consulted by the most prominent men of the time.

By contrast, the third book contains letters to twenty-five correspondents, who belonged to all layers and all professions of the Republic of Letters: the first part

⁵⁹² See Chapter 3.

concentrates on Gessner's correspondence with German-Swiss humanists and physicians. Next, a series of letters are addressed to Zurich students travelling around Europe for their training. Finally, a series of letters are taken from the copies kept by their author and were addressed to the greatest men: one son of Scaliger, the naturalist Leonhardt Fuchs, etc. This organisation highlights both the international reach and the variety of Gessner's interests and connections.

However, it may be surprising that Wolf chose not to publish the letters written by Gessner to his possible patrons, copies of which were kept in Zurich: for instance, he did not publish a copied letter to the Fugger, or to the Polish Baron Sigsimund or to Queen Elizabeth of England. In his published letters,⁵⁹³ Gessner claimed *he*, unlike others (Mattioli, for instance), had no patrons to pay for secretaries and thereby save him time. This idea of freedom from the imperial power, strongly expressed in the post-zwinglian Zurich, may account for the absence of patrons in the book.

Finally, a last omission in Gessner's *Medical letters* should be briefly indicated: although the *Medical Letters* genre was often closely related to case studies and to *consilia*, the published letters contained very few of them, and were almost all working letters, or rather, 'science-in-the-making' letters. Actually, the relationship between Gessner's letters and history was one reconstructed through the editors' mediation. While *consilia* were case studies, applied to a single case, but serving as a model for a larger, more general set of patients, the printed letters brought a knowledge born of the experience of a physician with plants, animals and humans, not because it was synthetic, but because it had happened, because they were authentic letters. Moreover, Wolf may well have had, already, in mind other uses for *consilia* and consultations by letter: the existence of the *Thesaurus medicinae*

⁵⁹³ If not in real life, as attested by the letter to the Council of Zurich asking for more money and stating his poverty.

practicae proves that there was a place in Gessner's writing for *consilia*, although not in his medical correspondence.

This is made apparent by the existence of the two pieces⁵⁹⁴ that were printed as an appendix to the letters. Each of these texts, the *Aconiti primi... Asseveratio* and the *De oxymelitis elleborati... libellus* had its own title page and prefatory epistle, and were printed so that they could be bound separately (as indicated by the signatures). They were nonetheless a key for the reader, reminding him that this book was principally a book of medicine, and directing his attention towards the mentions of this particular plant and of this particular remedy.⁵⁹⁵ Both items were omnipresent in the letters. Moreover, the whole collection was organised in order to highlight these two points of interest: the first book began with letters to Crato, who obtained in the addresses of the letters his full noble name: Crato von Krafftheim. The first three letters were taken out of chronological order, which was otherwise generally respected.⁵⁹⁶ They were mostly centred on the *Aconitum primum* controversy, and on the intervention of Crato in favour of his friend. Meanwhile, the last

⁵⁹⁴ The full titles read *Aconiti primi Dioscoridis Asseveratio et De oxymelitis Elleborati utriusque descriptione et usu libellus*.

⁵⁹⁵ This seems to have worked. In several copies I have seen, every mention of the *aconitum* and of the *oxymel* was annotated; moreover, the book (letters and pamphlets) was often bound with two other publications concerning the controversy over the *aconitum primum*, the *De stirpium aliquot nominibus vetustis ac novis ... Epistolae II*, Basle, Episcopus, 1557 and the *De rarior et admirandis herbis, quae sive quod noctu luceant, sive alias ob causas, Lunariae nominantur, Commentariolus ...*, Zurich, Gessner Brothers, 1555.

⁵⁹⁶ In a general way, letters in the books were organised by correspondent and by chronological order. However, some letters do not follow this order; Wolf argues in his Preface that he published the letters as they arrived (*Ep. Med.*, sign. α4r "Cum hasce Gesneri epistolas, alias quidem maturius, alias vero tardius ab amicis, pro cuiusque opportunitate, acceperim, et praeterea earundem argumentum varium et multiplex sit, ut certis locis aut cancellis includere difficile esset: neque rerum ipsarum, quod maxime voluissim, neque temporum aliarumque, circumstantiarum ratione, in earundem dispositione observare potui. Igitur, (quod commodissimum videbatur), quas ad eosdem scripsit, serie quadam, cum nonnulla mensium dierumque observatione, deinceps omnes disposui, ut hoc ordine, quae alibi brevius aut obscurius, alibi forte melius explicate aut illustratae non magno intervallo, legantur.") As for Gasser, Crato and Occo, all of whose letters disrupt this order, we know that this is highly improbable: they all sent their letters to Simler, who copied them: they were thus available in the beginning of Wolf's work.

letter of the collection is a letter to Melchior Guilandinus, who had been largely implicated in the fight against Mattioli, and to whom Gessner advised caution and discretion. It offered an appetising transition towards the appended pieces. It also conferred a certain unity on the books of letters, otherwise overpowering in the variety of subjects treated.

Editing a scholarly profile: an a-historical and universal publication?

The selection of the letters was not the only intervention conducted by the editors; Gessner's scholarly profile was also carved through careful editing, a common practice in the 16th century.⁵⁹⁷ A few letters published in the 1577 collection still exist in their manuscript version and allow us to view some features of the editorial methods of Wolf.⁵⁹⁸ There are two letters to Johannes Fabricius Montanus, two others to Johannes Funck, the copies annotated by Gessner of his letters to Placotomus, Caius and Fuchs, as well as one copy of a letter to Crato.⁵⁹⁹ However, the features here singled out can be found in most of the published letters.

First, Wolf treated letters really written and sent by Gessner, and the copies he had kept and annotated, in very different ways. While he scrupulously reproduced the copies in

⁵⁹⁷ Wolf's and Simler's editorial methods had nothing surprising for early modern editors. See E. J. Kenney, *The Classical Text. Aspects of Editing in the Age of the Printed Book*, Berkeley, Los Angeles, London, University of California Press, 1974, who demonstrates the relative distance from the word of the text manifested by editors of ancient texts in their editing practices, while editorial theory stressed the importance of carefully comparing and compiling the different manuscripts of a text

⁵⁹⁸ Simler might have shared these methods. However, from Gasser's letter – quoted above in the first part –, one can deduce that Simler was aiming at an uncensored publication.

⁵⁹⁹ However, another source is at our disposal: as he stated in his preface (*Ep. Med.*, sign. α4r: "Tribus autem varii argumenti libris, quartum, his adjiciendum, excellentium virorum Mattioli, et quorundam ejus fautorum de Aconito, epistolis, atque ipsius etiam Gesneri ad easdem responsionibus, destinaveram: quae eam controversiam, ingeniose sane et subtiliter utrinque disputatam, lectori dijudicandam decernendamque proposuissent."), Wolf had prepared for publication the letters exchanged in the controversy over the *aconitum primum* between Gessner, Mattioli and Donzellini: large red strikethroughs are visible on the manuscripts, as well as a few annotations. Here, the problem is less that of the status of knowledge than that of the scholarly ethos: most strikethroughs tend to suppress excessively rude or tense passages in the letters.

he printed version, except for a few alterations in the punctuation or in the words, he modified more vigorously the “working letters”. For instance, he cut out the endings of Gessner’s letters to Fabricius, especially the salutations: the conclusion of the letter dated 2nd August 1558 was cut, and its date changed in its printed version to a bare 22nd August. While this last change might simply be a printing or copying mistake, the suppression of the year is perhaps more intentional. So are certainly the disappearances of the salutations and of a postscript half in German half in Latin:

Farewell in the Lord, very erudite Fabricius, and greet your wife and our friends, especially the erudite doctors Pontisella and Belinus. Zurich, the 2nd of August, 58. Yours from all my soul, Conrad Gessner.

I would like to know, whether one finds laurel bays among you, and what one uses it for, and I would like to receive some, even small ones. One might find them near Ragartz, so that the transport would be quicker. I would like around 12 of them, but I do not want them sent before I understand better their price and means of transport.⁶⁰⁰

So far as the salutations are concerned, it is worth noting that, while D. Pontisella is also quoted several times in the published letters, every mention of D. Belinus has been erased. The suppression of the postscript in German is perhaps more understandable. While many of Gessner’s extant manuscript letters contained sentences in German, these were systematically erased in the printed letters. Vernacular medical letters were not the norm, and it seems logical that the editor would have suppressed these marks of a lower status.

⁶⁰⁰ «Vale in domino, doctissime Fabrici : et saluta uxorem, amicos, praecipue D. D. Pontisellam et Belinum. Tiguri. Augusti die 2 anno 58. T.T. ex animo Conradus.

Ich möchte gern wissen, ob man [Lorbeer] laden bei [euch] finden, und wie für : und ob an sy kümmerlich gar möchte bringen. Man funde sie vielleicht] zu Ragartz, inde brevior esset vectura. Desydero circiter XII, sed nolim misi, priusquam precium et vecturam commodiorem intellegam“ Gessner to Fabricius, ZBZ MsC50a26.

Another interesting aspect of censorship is the cutting out of several passages in the middle of the letters. For instance, the mention of an intervention of pastor Fabricius Montanus in favour of a D. Limacius, highly agreeable to Gessner, is cut out of the published letter:

I understand that you have taken care of and at heart Cyprianus Limacius together with his churches and I am very grateful to you for your kindness; and a little time ago, Limacius himself, because he had understood I had recommended him to you, said thank you.⁶⁰¹

The letters exchanged with Johannes Funck appear to have been treated slightly differently.⁶⁰² In the first letter, dated in both the manuscript and printed version to 26 March 1564, the editor – Wolf, judging by the marginal annotations – had replaced a passage concerning letter exchanges and a book from Christophorus a Vega by another describing a plant. He also had partly cut the end of the letter, in which Gessner asked Funck to pass on the information to Adolf Occo because he had no time to write it himself. The second letter (corresponding to the fifth letter to Funck in the printed collection, f. 96r) has been cut by nearly half, the first paragraph being entirely suppressed, and the postscript partly integrated in the letter. Moreover, and as will be shown, more importantly, the date of the letter has been changed and put forward by one year, from 21 January 1564 to 21 January 1565.⁶⁰³ Finally, several names cited by Gessner have been removed from the printed version.

⁶⁰¹ “Quod D. Cyprianum Limacium cum ecclesiis illis, tibi curae et [cordi esse] intelligo, benignitati tuae gratias habeo maximas : et jampridem ipse Limacius, eo nomine quod per me tibi commendatum se senserit, gratias egit.” ZBZMs C50a26.

⁶⁰² Both the manuscript letters and their printed version are given in Appendix VII.

⁶⁰³ Obviously, changes in the dates may be mistakes imputable to the scribe or to a change of calendar. As a general rule, Gessner did use the new-style dates, with the year beginning on the 1st of January, and the dates in the collection seem to follow this same calendar, although the new-style calendar would not be adopted by Zurich before 1701. However, I would argue that they were not, and that changing the dates of letters also changed the way people read them.

With Wolf's endeavours to refine Gessner's image, the segments too revealing of the latter's habit of writing on the same day several letters to different correspondents in almost the same terms were cut out. For instance, the episode of the messenger who went mad and destroyed several letters I noted in Chapter 2 was kept in the letter to Gasser dated 21 January 1564, but expunged from the letter to Funck of the same day present in the collection and this same letter was post-dated by one year, thus making it more difficult to spot any similarities between the two letters.⁶⁰⁴

Wolf also took great care to maintain an ever-civil tongue in Gessner's mouth. He removed any rash judgements on powerful people from the text of the letters: a comment made by Gessner to Melchior Guilandinus about the printer of his *History of Animals* is therefore carefully suppressed:

Concerning my volumes on the animals, and the book of *Icones*, I would be extremely happy to gratify you by sending them; but I cannot send them from our town. In fact, your booksellers almost never receive books from here, nor send their parcels here. However, if you could have one of your merchants or booksellers add it to his baggage from Basle or Frankfurt, I could arrange with the Printer for him to sell it to you at no more than the usual price for booksellers.⁶⁰⁵

In the manuscript letter, the last sentence reads:

I could arrange from the Printer, in general *a hard-hearted man*, for him to send it to you at no more than the usual price for booksellers.⁶⁰⁶

The printer in question was Christoph Froschauer, also printer of the 1577 *Medical letters*.

⁶⁰⁴ See ZBZMsF60.52, *Ep. Med.*, ff. 31v-32r (for Gasser) and f. 96r (for Funck). Another letter, addressed to Johannes Culmann and similarly dated, might well have been cut in the same way (*Ep. Med.*, ff. 45v-46r).

⁶⁰⁵ *Ep. Med.*, f. 140v.

⁶⁰⁶ «[...] efficiam apud Typographum hominem alioqui austerum, ut non majoris, quam bibliopolis solet, tibi divendat...».

These modifications related to the preservation of Gessner's, or other scholars', scholarly ethos. However, many of them did not comply completely with this social explanation. They also had consequences for the reading one can make of the letters. The same Ms F60.52 offered for instance some precise instructions concerning patients mentioned in the letters:

About this cutting of an artery, which was a success due to my advice, I have not the time to write now. To put it briefly: The Surgeon named Felix Wirth, who suffered a terrible migraine, followed my advice and made a transverse cut of the artery in the afflicted temple (where the artery appeared inflated); and he suddenly felt better, and until now – for numerous years – the pain never came back, while before it came back yearly. It is a wonderful story, and Doctor Thaddeo Duno was present. (...) These days, I have completely cured - Thank God - Master Balthasar, the old bookseller –he is more than seventy years old, who suffered from pleurisy, without cutting the vein, by using my oxymel and my decoction of fenugreek.⁶⁰⁷

In the printed version, the names are erased, and the sentences shortened. By these means, Wolf keeps the information contained in the letters general, and avoids anchoring the letter too much in local circumstances.

The same logic is operational in the other manuscript letter to Funck: the replacement of a paragraph dealing with personal and social questions by the description of a plant adds to the general and universal dimension of the letter, and authorises Wolf to use a passage likely to have been written on a separate page, as in a post-script, or to have featured in another letter Wolf had rejected, although he had not wished to lose entirely the scientific information it contained. What Wolf was interested in was thus not the social

⁶⁰⁷ “De arteriotomia illa, quae meo consilio feliciter successit, non vacat nunc scribere. Summa est : Chirurgus Felix Wirth nomine hic laborans immani hemicranico dolore, meo consilio arteriam in crotapho affecto (ubi arteria inflata apparebat) per transversum amputavit, et subito convaluit, et hactenus multis jam annis non rediit dolor: cum prius anno interposito rediisset. Mira est historia, aderat et D. Thaddeus Dunus. oxymeli quoque meum non vacat jam describere, multum quidem a Julianico distat. His diebus pleuriticum M. Balthasarem bibliopola : qui annos 70 excedit, senem, vena non secta, oxymelitis usu et decoctione foenograeci mea, curavi, Dei gratia, probè. » Gessner to Johannes Funck, ZBZ Ms F60.52.

relationships of Gessner: he kept references to the network to far fewer than he could have done through the manuscript letters. He cared much more for a general, universal and not local and historically situated knowledge on plants and medicine, and tried to iron out the aspect of “working letter”, to promote a much more thorough consideration of plants and medical experiments. In contrast to the erasure of names of patients, Wolf often added precise details, sometimes in square brackets, sometimes directly within the printed text of the letter, concerning the authors of books, as in the printed version of a letter to Crato, dated 16 August 1561, and the first letter in the collection (The passages added by Wolf are featured here in bold characters). Presenting the work of Paracelsus, Gessner here wrote:

I send a paper written in German, which I found by chance last year, by a certain disciple of his, a Johannes Montanus **from Silesia**. I have none of his unpublished books, except for a few pages of some experiments, in which there is nothing especially remarkable; and Montanus himself held them in contempt as unworthy of Theophrastus [Paracelsus]. There is in Basle a physician, son of the deceased theologian Karlstadt, who is obviously a Paracelsian. A year earlier this man edited his pamphlet *De vita longa*. I see that many men of this kind *are Arians and deny the divine nature of our Christ*. I think he was one, because in the paper **of this Montanus from Silesia (I hear he was from Striegau and called Schultz)** all the theologians of our times are condemned. Oporinus, from Basle, was once a disciple **of Theophrastus** and an intimate friend of his, and he tells surprising tales about the commerce of the latter with demons. They employed a vain Astrology, Geomancy, Necromancy, and other forbidden arts of this sort.⁶⁰⁸

⁶⁰⁸ “Mitto Schedam Germanicae scriptam quam a Jo Montano quodam Silesio ejus discipulo, superiore anno nactus sum. Librorum ejus nondum editorum, nihil habeo, praeter quaedam pauca folia experimentorum quorundam, in quibus tamen nihil egregii est: et ipse Montanus, ea contemnebat tanquam Theophr[asto]parum digna. Basileae Medicus est, Carolostadii Theologii defuncti filius, plane Theophrasteios. Qui de vita longa libellum ejus ante annum edidit. Video plerosque hujus farinae homines, *Ἀρειανούς εἶναι καὶ τὴν τοῦ Χριστοῦ ἡμῶν θεότητα ἀρνεῖσθαι*. Hunc esse puto quod in scheda Montani illius Silesi, (Stringensem esse et Schultzius appellari audio) omnes nostri temporis Theologi damnantur. Oporinus Basileae olim discipulus Theophrasti, et familiaris fuit, is mira de ejus cum daemonibus commercio praedicat. Astrologiam vanam, Geomantiam, Necromantiam, et hujusmodi artes prohibitas exercent», Gessner to Crato, 16 August 1561, ZBZ Ms C50a40 and *Ep. Med.*, f. 1v.

And later

This Karlstadt from Basle **called Bodenstein** has sent to the press a few months ago the *De anatome corporis humani libellum* of Theophrastus.⁶⁰⁹

By providing the reader with details on the publications or authors mentioned by Gessner, by tacitly inserting them into the text, Wolf tried to strengthen the universal scientific value of the letter. Taking the letters out of their context, sometimes erasing the date or suppressing the personal details or the discussions of interaction modified the status of the letter: it became a text of knowledge, intended for the instruction of the reader. It also became symbolic and universal for the epistolary genre.

Conclusion

Building a book out of bundles of letters, creating knowledge out of sparse leaves of paper was certainly a project Gessner could not have disowned. As it was, Simler and Wolf's treatment of his letters very much resembled what their master had done all his life. The collecting process bore all the qualities of the scholarly gathering of information. Local contacts guaranteed access to the matter of knowledge and confirmed its scholarly value. It also reaffirmed the values of the scholarly community, this ever-increasing Republic of Letters: a collective project, the collection of Gessner's letters involved not only the authors and recipients of the letters, but also all those who had family, working, medical relationships with them.

Obviously, material could resist its handlers. By entitling the correspondence *Epistolae Medicinales*, by placing them in a framework that might seem a mould in which knowledge could be formed, the editors, and later the printers, changed the letters into something

⁶⁰⁹ « Carolstadius ille Basiliensis, Bodenstein dictus, ante paucos menses miserat huc imprimendum Theophrasti de anatome corporis humani libellum. »ZBZ Ms C50a40 and *Ep. Med.*, f. 2r.

more than lists of requests and discussions with friends: an object of knowledge, from which one would read and learn. The editors shaped them into universally valuable texts, by editing, facilitating the reading and understanding of particulars, and placing them under a general light as much as possible. The selection of letters, their arranging, all came together in order to change them into facts, circulated by trustworthy members of the Republic of Letters. Editors erased any asperity in Gessner's persona, thus ensuring his authority, while they promoted a direct, immediate understanding of any inference in the scientific contents of the letters, thus extracting the letters from their own particular and historically located dimension and erecting, together with a memorial to Gessner, a monument of knowledge.

CONCLUSION

Letters, in the early modern period, were not merely a mode of communication between scholars: they were knowledge-in-the-making. Between the particular and the general, they offered early modern scholars a space for negotiations in a world where deep doubts on the nature and status of knowledge were shattering the establishment of knowledge itself. For Conrad Gessner, letters were a way to negotiate between his individual self and the expectations of a scholarly audience, between his dialogue *in absentia* with friends and the definition of a community of scholars, united by the expressed wish of collaborating towards a total knowledge of the world. This community, functioned at several levels: under a discourse common to this Republic of Letters, a conglomerate of fragments of correspondence networks, of local social groupings and of scholars who were always on the move, structured and organised the exchange of letters and of objects. Within these fragmented worlds, Gessner's letters contributed to an effort to create knowledge. A vector of the exchange of particulars, of news, and of objects, anchored in their reporter's personal experience, letters, because they circulated, via other cities, via other hands, and other letters, changed the status of particulars. Standardised into narratives, news was discussed, thought about, debated with local neighbours or remote correspondents. And through this creation of a consensus, through the establishment of generally agreed matters of fact, the epistolary dialogue created a tentative, provisional knowledge of nature and medicine.

But letters survived long after the epistolary dialogue had stopped. They became the very matter of knowledge. Gessner cut and pasted them in the manuscripts of his books, often to justify his illustrations; he also included them among his case notes and his secret recipes, as many fragments of experience. Easily fragmented, easily relocated, letters helped to create a general knowledge based on an accumulation of facts, of *historiae* and experiences. Turned into a book, to which the label of the genre of Medical letters was attached, they constituted both a memorial to Gessner's scholarly persona and a place where others found knowledge. They also redefined the role of the reader. Instead of accepting, as the usual imagery of scholasticism has it, the authority of the printed word, the reader had to find his own way and to apply his critical judgement, in order to determine the authority attached to each of the reported facts.

From the general to the particular

To understand early modern correspondence, however, we need to take into account not merely the exchange of news, ideas, and goods, but also other usages of correspondence this work did not examine at length. Correspondence not merely circulated facts, but transmitted knowledge: a knowledge reinforced, fixed, and generalised by the authority of print. But this fixing was not definitive and each and every reader, out of this generally agreed, factual knowledge, constituted his individual knowledge. Readings, indeed, were necessarily 'plural': the intense variety of annotations in the margins and title pages of copies of Gessner's *Epistolarum Medicinalium libri III* prove it. These books do not belong to the category of prestige editions, covered with dust on library shelves without ever being opened. Their readers perused them attentively, appropriated, or rather incorporated their contents in the body of what they, themselves, knew. Their annotations, their marginal *tituli*, summaries, and tables of contents, the references they made to other

botanical or medical treatises filled Gessner's *Epistolae Medicinales* with their own, particular readings of the letters. And, in the three copies, all owned by physicians, kept in Basle Universitätsbibliothek, three sixteenth- and seventeenth-century readers appropriated totally different contents, determined three different receptions for the letters. In the book, one found a set of remedies, another discerned a series of mini-treatises on plants and an entry into social intercourse in the Republic of Letters, and the last discovered a receptacle for encyclopaedic knowledge.

Moreover, knowledge was not only transmitted by print, and simultaneously with the 1577 collection, another filiation in the transmission of knowledge took place, more discreetly, but no less physically. In Zurich Zentralbibliothek, especially – however –, Johannes Heinrich Rahn's legacy was amazingly preserved. Among the papers of this eighteenth-century physician in Zurich, besides a number of *epistolae medicinales*, copies of the letters he sent and received, was a notebook. There, he collated cures and recipes, minutely pillaging the *Thesaurus medicinae practicae* and the letters Wolf and Gessner had pasted into it. Most of the time, he replicated them studiously, carefully. But he also, in a manner after Gessner's own heart, appended to the end of the volume the manuscript epistolary exchange between Thomas Erastus and Gessner on plague. These notes, extracted and carefully copied from the *Thesaurus medicinae practicae*, attest to another kind of transmission of epistolary knowledge, one based on the hand-to-hand legacy of the master's papers, and on the circulation of manuscript knowledge. It also highlights the necessity of always renewing the consensus over matters of fact, and the importance of the digestion of letters, of the archival relationship they created with their successive owners.

Understanding how readers, poachers in the fixed field of the printed text or link in the long-lasting lineage of Zurich physicians, appropriated epistolary knowledge, and more importantly, incorporated it the body of their own knowledge would thus help us to

understand how early modern knowledge articulated the general and the particular in yet another way.

These analyses certainly place in the foreground a real epistolary culture in the sixteenth century, which shaped the production of knowledge and the life of men and women in the sixteenth century. This epistolary culture is still relatively unknown by historians, and largely linked to the publications of correspondences. Studying the variety of ways in which manuscript and printed letters were exploited may well bring new insights on this culture defined and manifested by Gessner, but also on other individuals. Johannes Crato's letters, for instance, both in their manuscript forms and in the printed version edited, at the end of the sixteenth-century, by Lorenz Scholtz, open, for instance, quite different perspectives on the way in which epistolary culture shaped early modern medicine and early modern scholarship. Letters cannot be, for historians, transparent sources and a means of access to the self of their author, nor substitutes to compensate for absence. They are a complex object, a source and a practice at the same time, and must receive the attention which this complexity deserves, in order to give the individual his place in history.

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APPENDIX I: NOTE ON SPELLINGS

Spelling of names.

The spelling of Gessner's name has been the object of much debate. I follow the conclusions of Cynthia M. Pyle in "Conrad Gessner on the spelling of his name," *Archives of natural history* 27 (2000), 175-186: in Latin, it is spelt Gesnerus, and in the vernacular Gessner.

For other scholars, I have, as a general rule, used the vernacular forms of Renaissance scholars' names, except when usage demands keeping the Latin form (Camerarius instead of Kammermeister, for instance). For correspondents for whom I was not able to find information, I have not been consistent with this rule: if the passage to Latin was made through the simple adoption of a suffix -us, I have taken it out, using the most current spelling found in the letters, or the signature if it existed (Etschenreutter receives several spellings). In this case, I gave in the list of correspondents the various spellings I found in the letters.

Sometimes, the spelling was too variable or liable to too many mistakes and I have preferred to keep a Latin form.

For the names of cities, I usually give the English form, and not the vernacular form (Lyons instead of Lyon; Strasburg instead of Straßburg) including in the bibliography.

Names of plants and remedies have been generally italicised and kept in the Latin form as used by Gessner, especially when scholars were discussing ancient plants, and not a modern one, or the identification with an ancient plant.

Quotations.

In order to make reading easier, I have slightly modernised Latin and Greek texts: distinguishing between *u* and *v*, *i* and *j*; modernising punctuation by changing *:* into *;* and expanding abbreviations. Diphthongs are separated; abbreviations, contractions, ligatures are resolved. Greek words in the Latin texts are italicised in the translation.

Quotations important for our argument are translated directly in the main text, but less significant quotations are given in footnotes, in Latin. In order to keep to the word limit, I have opted for the unsatisfactory solution of giving the Latin original of my translations only if the Latin original has not been printed. The full text of the *Epistolarum medicinalium libri III*, Zurich, Froschauer, 1577 is available online:

http://www.uni-mannheim.de/mateo/cera/autoren/gesner_cera.html

as well as the letters to Jean Bauhin (Basle, Waldkirch, 1591):

<http://gallica2.bnf.fr/ark:/12148/bpt6k93854p.r=gesner+bauhin.langFR>.

Obviously, when I refer to manuscript letters, the Latin text is given fully in the footnote.

Similarly, I do not give the Latin for the quotes extracted from the *Historia Animalium*, the *Bibliotheca universalis* and the *Pandectarum libri*.

For the same reason, a book is given a full reference at its first mention, then simply an abbreviated title and the year of publication.

Abbreviations:

BU: *Bibliotheca universalis* (Zurich, Froschauer, 1545).

Ep. Med.: *Epistolarum medicinalium libri III* (Zurich, Froschauer, 1577).

Ep. Med. IV: *Epistolarum medicinalium Conradi Gesneri Liber quartus* (Wittenberg, Simon Gronenberg, 1584).

Epistolae: *De plantis a divinis sanctisve nomen habentibus Caput.... Additae sunt Conradi Gesneri medici Epistolae hactenus non editae* (Basle, Waldkirch, 1591).

HA1, HA2, HA3, HA4: the four main volumes of Gessner's *Historia Animalium*: *Historiae animalium liber I, de quadrupedibus viviparis* (Zurich, Froschauer, 1551); *Historiae animalium liber II, de quadrupedibus oviparis* (Zurich, Froschauer, 1554); *Historiae animalium liber III, qui est de avium natura* (Zurich, Froschauer, 1555); *Historiae animalium liber IV, qui est de piscium et aquatiliu animantium natura* (Zurich, Froschauer, 1558).

Pandectae: *Pandectarum sive Partitionum universalium Libri XXI* (Zurich, Froschauer, 1548).

For libraries and archival sources:

UBB: Basle Universitätsbibliothek

ZBZ: Zurich Zentralbibliothek

BNF: Bibliothèque Nationale de France, Paris.

APPENDIX II: BIOGRAPHICAL NOTICES OF GESSNER'S CORRESPONDENTS

The following list inventories the correspondents of Conrad Gessner. An asterisk * before the name indicates the correspondents for whom a letter, manuscript or printed, still exists. Other correspondents are those who sent pictures of plants or animals, as indicated in Gessner's list of helpers that begins the *Historia Animalium*, as well as in the census of the senders of plants and pictures of plants listed by Rudolf Steiger in "Erschliessung des Conrad-Gessner-Materials der Zentralbibliothek Zürich", *Gesnerus* 68 (1968), 29-64. The dissertation of Katharina Springer („*De avium natura*“ von Conrad Gessner (1516 –1565). *Die Illustrationen des Vogelbuchs*, Dissertation, Rostock, 2007) also recovered a small number of correspondents, senders of pictures of birds, from a comparison between the 1555 and the 1585 editions of the *Historia Animalium liber III*. I have also included people whose name was mentioned as the addressee of a letter in another, existing letter.

This list is therefore merely provisional and no doubt incomplete. I have systematically indicated the names featuring in Gessner's *Liber amicorum*, and drawn on the information provided both by Alfredo Serrai (*Conrad Gessner*, 1990) and Richard Durling ("Conrad Gessner's *Liber amicorum* 1555-1565", *Gesnerus* 22 (1965), p. 134-159) in their presentation of this source. I have indicated each of the correspondents having signed the *Liber amicorum* with "LA" followed by the number indicating the rank of the signature in the manuscript.

Besides the information collected by Durling and Serrai, these notices have been established with the help of several biographical tools: *Allgemeine Deutsche Biographie*, 56 vols, Leipzig, 1875-1912; *Allgemeine Encyclopädie der Wissenschaften und Künste in alphabetischer Folge von genannten Schrifts*, edited by Johann Samuel Ersch and J. F. Gleditsch, 1834; *Biographie Universelle, ancienne et moderne*, edited by Michaud, Paris, 1843 sq.; *Biographisch-bibliographisches Kirchenlexikon*, online: <http://www.bautz.de/bbkl>; *Biographisches Lexicon der hervorragenden*

Ärtze aller Zeiten und Völker, edited by A. Hirsch, Vienna/Leipzig, 1884-1888; *Contemporaries of Erasmus, A Biographical Register of the Renaissance and Reformation*, edited by Peter Bietenholz and Thomas Deutscher, Toronto, 1985 sq.; *The Dictionary of National Biography*, edited by L. Stephen, London, 1885-1901; *Oxford Dictionary of National Biography From the Earliest Times to the Year 2000*, edited by H. C. G. Matthew and Brian Harrison, 61 vols, Oxford, Oxford University Press, 2004; *Dictionnaire historique et biographique de la Suisse*, edited by Victor Attinger, Neuchatel, 1921-1934; *L'Europe des Humanistes (XIV^e-XVII^e siècles)*, edited by J.-F. Maillard, J. Kecskeméti and M. Portalier, CNRS and Brepols, 1995; *Neue Deutsche Biographie*, Berlin 1953 sq; *Nouvelle Biographie Générale*, edited by Jean Chrétien Ferdinand Hoëfer, 1852-1866.

A CASTROMURO, Bartholomeus, an inhabitant of Chur, featured in the list of helpers of the *Historia Animalium*.

AEMYLIUS, Georgius, (Mansfeld, 1517 – Stollberg, 1569) studied theology in Wittenberg, where he met Melanchthon. He taught at the Lateinschule in Siegen, then, from 1553, was a superintendant in Stolberg, where he was living when he corresponded with Gessner about botany and contributed botanic samples, poetry and pictures. He published several theological works.

AGRICOLA [BAUER], Georg (Glauchau, 1494 – Chemnitz, 1555) studied in Leipzig, in Italy where he took his doctor's degree, and became town physician in Joachimsthal, where important mining works were taking place and where he collected material for the *De re metallica*, before leaving for Chemnitz, equally a centre for the mining industry. He is one of the rare correspondents of Gessner who did not adhere to Reformation ideas. Gessner named him in the list of helpers of the *Historia Animalium*

AGRICOLA, L. *no information was found on this correspondent.*

ALBERTUS, Johannes (fl. 1565-1580) studied law in Frankfurt until 1565, then in Heidelberg. He most probably stopped in Zurich on his way back from his studies and signed the *Liber amicorum* in 1565 (LA221). He was later a chancellor to the Count of Bavaria.

ALDROVANDI, Ulisse (Bologna, 1522-1605) studied law and medicine in Bologna and Padua, and became a public professor at Bologna University, where he centred his

teaching on natural history. He also was a member of the College of Physicians of Bologna. He was a keen collector, and left a museum of natural history samples, as well as a monumental *Ornithology*. He corresponded for a while with Gessner and contributed several plants to his collection.

ALESSANDRINI [ALEXANDRINUS], Giulio (Julius), (Civezzano, near Trento 1506 – Vienna 1588) was a court physician to Ferdinand I, Maximilian II and Rudolf II and a well-known medical humanist. He signed the *Liber amicorum* in 1559 (LA116). In 1563 Gessner dedicated his *De anima* to him.

ALYSIUS, Michael, a Frenchman from Troyes, was quoted among the contributors of the *Historia Animalium*.

***AMERBACH, Basil**, (Basle 1533 – 1591), son of Boniface. Followed in the footsteps of his father and occupied important functions in the Faculty of Law of Basle University.

***AMERBACH, Boniface**, (Basle, 1495 – 1562) studied Law in Freiburg and Avignon. From 1525, he taught Law at Basle University, where he was five times Rector. He married Martha Fuchs, the daughter of the rich merchant of Neuenburg am Rhein Leonhardt Fuchs, and had a son, also a jurist, Basil. He was close to Erasmus of Rotterdam, whose religious beliefs he followed. After 1535, he also occupied important civic functions in Basle and patronised several artists and scholars, including the younger Gessner.

***ANDREA A CROATIA [ANDREA CROANIUS], Johannes**, was probably a physician, who wrote to Gessner about Petrus Martyr and medicaments to induce abortion. He also sent news about an epidemic of catarrh.

***ANGELUS, X**, was a physician and sent a case narrative of urinal problems.

ANGUILLARA, Luigi, (Anguillara Sabazia, 1512 – Ferrara, 1570) was a well-travelled botanist and the author of a book of *Semplici* (Venice, Valgrisi, 1561). He directed the botanical garden in Padua from 1546 onwards and exchanged botanical samples with Gessner, according to Rudolf Steiger.

***ARETIUS [MARTINUS, MARTI], Benedictus**, (Bern, 1505 - 1574) studied in Marburg and was a Professor of Theology in Bern Academy. The author of several theological and philological works (including a Hebrew grammar), he was a constant correspondent of Gessner and contributed in 1561 a description of around forty alpine plants (*Stocbornii et Nessi in Bernatium Helvetiorum Ditione montium et nascentium in eis Stirpium descriptio*) to his edition of Valerius Cordus' *Annotationes on Dioscorides*. He apparently

possessed a botanical garden in Bern, and was a close friend of Gessner, who named a plant after him, after he had provided several plants and pictures of plants. He signed the *Liber amicorum* around 1558 (LA57) and was named in the list of helpers of the *Historia Animalium*.

ARLENIUS [VAN EYNDHOUTS], Arnoldus Peraxylus, (Aarle (The Netherlands), 1510 – Florence, 1581), studied in Paris, Ferrara, and Bologna, until he became an excellent Greek scholar. He worked with printers in Basle, then travelled to Venice, and became a librarian for Diego Hurtado de Mendoza. He collected manuscripts, and published several works on Greek literature. Gessner named him in the list of helpers of the *Historia Animalium*.

***ASONUS GRAY, Thomas**, *I have no information on this correspondent (a patient of Gessner)*.

***AVIENUS [VOGEL], Jacob**, came from the Canton of Glaris. Gessner wrote to him a letter *De montis admiratione*, printed in his *Libellus de lacte*, Zurich, Froschauer, 1541.

***BALE [BALEUS], John**, (Cove, Suffolk, 1495 – Canterbury, 1563) studied in the Norwich Carmelite monastery, then in Cambridge. A pastor in Suffolk, his religious views and miracle plays earned him Thomas Cromwell's protection. After the latter's fall, Bale flew to Flanders and spent some time in Basle, where he may have met Gessner. He then returned to a living at the Irish see of Ossory. Queen Mary's accession to power led him to flee again, after various peripeties, to Basle and Frankfurt. A new return, when Elisabeth I came to power, led him to Canterbury, where he died. Gessner dedicated the *Mithridates* to him, in 1555.

***BAUHIN [BAUHINUS], Jean (the Younger)**, (Basle, 1541 – Montbéliard, 1613), was born in a family of physicians exiled to Basle for religious reasons. He studied medicine in Montpellier and Tübingen, and practised medicine in Basle and Lyons. From 1570, he was court physician to the Duke of Wurtemberg in Montbéliard. He was very close to Gessner, whom he accompanied on botanical expedition and whose *Liber amicorum* he signed in 1560 (LA130). He contributed numerous plants to Gessner's collection and exchanged an abundant correspondence. A number of letters were printed in 1591, in Jean Bauhin, *De plantis a divis sanctis nomen habentibus. Additae sunt Conradi Gessneri ... epistolae*, (Basle, Waldkirch 1591).

***BAUHIN [BAUHINUS], Jean (the Elder)**, (Amiens, 1511 – Basle, 1582) was a court physician to Marguerite de Navarre before he left France and fled religious persecutions to Basle. There he practised medicine and taught in Basle medical faculty. He

contributed numerous plants to Gessner's collection and maintained with him, sometimes through his son, an important correspondence.

BAUMANN [BOUMANN], Gerhart, (Emmerich, fl. 1556-1589) was a town physician in Bremen. He is listed among the senders of plants in Steiger's list and signed the *Liber amicorum* (LA 31) in 1556. He apparently showed the head of a viper to Gessner.

BECHIUS [BÄCHI], Philippus (Ulan Bator, 1521 – Basle, 1560) was a Professor in Basle University where he taught successively Greek, Logic and Dialectic. A physician, he published an *Epitome* of Aristotle's *Logic*. He was therefore linked to Froben, Episcopius, as well as Arlenius and Hospinianus. Gessner gave him a Greek poem to use as a dedication for his book. Steiger lists him among the senders of plants.

BELICOCCUS, Andreas, lived in Verona and is mentioned in the correspondence with Jean Bauhin as the sender of several plants as well as in Steiger's list. He apparently maintained useful links with Rome.

BELLINCHETTI, Francesco, from Bergamo featured in the the list of helpers of the *Historia Animalium*. One of the many inhabitants from Bergamo who adhered to Reformation ideas, he fled to the Graubünden, where he exploited an iron mine with his brother.

***BELINUS, X**, was a physician from Chur, with connections to Pontisella and Fabricius Montanus, and sent Gessner a recipe of his *oxymel*.

***BELON, Charles**, was a brother of Pierre Belon, an apothecary who lived in Paris. He wrote to Gessner after Pierre Belon's death to try and sell him some material belonging to his late brother.

BELON, Pierre (Le Mans, 1517 – Paris, 1564) studied in Wittenberg and in Paris. He travelled in several countries, and especially in the Middle East and around the Mediterranean Sea. He was one of the most prominent naturalists of his time, and published a *Histoire naturelle des estranges poissons marins* (1551) and a *Histoire de la nature des oyseaux* (1555) as well as several botanical works. He is mentioned by Steiger as a provider of Gessner's plants.

***BERALDUS, Franciscus**, (fl.1558-1592) taught humanities in Lausanne, at the same time that Théodore de Bèze and Jean Ribitt taught there. With Gessner, he exchanged several letters in Greek. He published jointly with Sigismundus Gelenius an edition of Appianus in Geneva, Henri Estienne, 1592.

***DE BÈZE [BEZA] Théodore**, (Vézelay, 1519 – Geneva, 1605) studied law in Paris and Orléans. From 1549 onwards, he taught Greek in Lausanne, before joining Calvin in Geneva in 1558 and succeeding him in 1564. He published numerous humanist works, but was mostly an active Reformer, who took part to many religious controversies throughout his life. He especially issued an edition of the Greek New Testament. He wrote at least one letter to Gessner, in 1549.

BIBLIANDER [BUCHMAN, BUCHMANN], Theodor (near St-Gall, 1504 – Zurich, 1564) studied in Zurich and Basle, then went to teach theology and the Old Testament in Zurich between 1534 and 1560. He participated in several important religious disputes. Well versed in Oriental languages, translation and exegesis, he published a translation of the Koran in 1543 and a Hebrew Grammar. He died of the plague in 1564 in Zurich.

***BIFRONS [BIFRAN], Jacobus (Jachiam)** (Tirano, 1506 – 1572) was a physician and a jurist from the Graubünden, author of a several translations in Romanche of German texts and of a Latin translation of the New Testament. Although he lived in Zurich, a letter to Gessner on the subject of milk and cheese, *De operibus lactariis epistola*, was appended to the latter's edition of the *Ars Magica*, Zurich, Jacob Gessner, 1563.

***BLAURER [BLARER], Ambrosius**, (Constance, 1492 – Winterthur, 1564), studied theology in Tübingen with Melanchthon. He was, together with his brother Thomas, one of the main agents of the conversion of Constance to the Reformation, and then preached in various German cities. After the downfall of the Reformation in Constance, Blaurer fled to Biel and Winterthur, where he died. A correspondent of the main Reformers of the time, many of whom were intimately linked to Gessner (Ulrich Zwingli, Wolfgang Capito, Heinrich Bullinger,...) Blaurer was mainly a patient of Gessner, and of his student Conrad Forer, who consulted Gessner on his behalf.

BONER [BOMERRUS], Johannes N[icolaus] was a Polish nobleman, and contributed natural samples and description to his *Icones Animalium*. He may also be the one Gessner wrote to in MsC50a52.

BOUTIN [BOUTINUS / BUTTINUS / BINTINUS], Pierre was an apothecary from Avignon. He accompanied Gessner, Petrus Figulus and Gessner's painter Johannes Thomas in a trip to Lucerne and its environs in 1555 (Schmiedel, *Vita* p XIX, XLII). He signed the *Liber amicorum* in 1561 (LA93) and was living in Lyons in 1562, where he served as a go-between in mail exchange. He also contributed several botanical samples, and is listed by Steiger.

***BRIXINUS, Hieronymus**, a physician from Chur, asked in 1561 for a consultation on scrofula and discussed the identification of a fish in the *Historia Animalium*. He also mentioned Johannes Pontisella, known to both men. He signed the *Liber amicorum* (LA149).

***BRUDO [BRUDUS] Manuel**, (Portugal, 1500 – 1585) fled religious persecutions in Portugal and practised medicine in Antwerp (where he met Amato Lusitano), Italy, London, and later Constantinople. He met Gessner during his stay in Venice, and dedicated to him the *De ratione victus in singulis febris secundum Hippocratem in genere et singillatim libri III*, Venice, Johannes Rubeus, 1544.

***BRUNNER [FONTINUS], Fridolin**, (Glaris, fl. 1517- 1542) studied under Zwingli in Glaris and later in Basle University. He then took up various position of preacher in the Canton of Glaris and fought for the Reformation. A correspondent of all important men in Zurich, especially Bullinger, he also was a patient of Gessner.

***BUCHARDUS MYTHOBIUS, Hector**, was a Polish court physician to Duke Eric of Brunswick and lived in Minden, in Prussia. Gessner was introduced to him by Thomas Erastus. According to the *Historia Animalium*, Mythobius apparently sent a picture of a sea monk. He signed the *Liber amicorum* in June 1556 (LA17).

***BUCKHARDT [BUCARDUS], Apollinaris**, a physician of Solothurn, exchanged information on possible patrons, on animals and on medical sources, as well as seeds with Gessner. He was also in relation with Aretius.

***BULLINGER, Heinrich**, (Bremgarten, 1504 – Zurich, 1575) studied theology in Cologne with Erasmus. He first preached in Kappel, then succeeded Zwingli in 1531 as head of the Zurich church and pastor at the Grossmünster. As such, he was in close contact with Gessner, who turned to him in letters on several occasions.

BUOTZ Sebastian lived in Strasburg, and was mentioned in the list of helpers of the *Historia Animalium*.

***CAIUS [KAY], John**, (Norwich, 1510 – London, 1573) studied in Cambridge, then travelled to Padua and got his medical degree in 1541. He went back to England in 1543, via Italy and Switzerland, where he stayed for a while in Basle and perhaps met Gessner. Back to England in 1545, he taught anatomy in London, became a member of the Royal College of physicians, and was a physician to King Edward VI, Queen Mary and Queen Elizabeth. In 1558, he assumed headship of Gonville Hall College in

Cambridge. He published several books on medicine and natural history. He was a close correspondent of Gessner, who quoted him in the *Historia Animalium* several times and contributed pictures of plants and plants.

***CALVIN, Jean**, (Noyon, 1509 – Geneva 1564), studied law in Orleans and Bourges, then, around 1531, converted to Reformation ideas. He fled Paris for the court of Marguerite de Navarre, and later for Basle and Geneva. In 1541, he established a Calvinist Republic in the city, and in 1559, founded Geneva Academy, directed by Théodore de Bèze. One letter dated of 1544 was edited in the 19th century.

CALZOLARI, Francesco, (1521-1600) was an apothecary in Verona, where he apparently met Gessner in 1563. The two men climbed Monte Baldo together. A keen collector of *naturalia*, he left an important museum and exchanged numerous plants with Gessner. Steiger mentions him in his inventory.

***CAMERARIUS [KAMMERMEISTER] Joachim (The Younger)**, (Nuremberg, 1534 – 1598) studied in Wittenberg, Leipzig, Breslau and Bologna where he got his Medical Degree. A keen botanist, he founded a botanical garden in Nuremberg, and kept close ties with numerous European scholars, including Gessner, with whom he exchanged botanical samples and news. He also edited Pietrandrea Mattioli in German. Later, he bought Gessner's paintings of plants from Caspar Wolf.

CAMPELL [CAMPELLUS] Huldreich, (Süs, 1510 – Schleins, 1582) was one of the active Reformers of the time, a correspondent of Bullinger and the author of several books on Rhetic Alps. He is mentioned as a provider of plants in Steiger and signed the *Liber amicorum* around 1562 (LA 161)

CAPITO Wolfgang Fabricius, (Hagenau, 1478 – Strasburg, [1542]) studied medicine in Ingolstadt, Basle and Freiburg, and theology in Basle. As a Reformer, he was close to Bucer. Gessner lived with him during his studies in Strasburg.

***CARDANO Girolamo**, (Pavia, 1501 – Rome, 1576) studied mathematics and medicine in Pavia and Padua. He led an adventurous life full of surprises that took him throughout Italy and Europe, from Pavia, Bologna, Milan, to Scotland, from an appointment as court physician to a defeated attempt to enter a local college of physicians. In 1555, when Gessner received his letter, he was a Professor of medicine in Pavia, but wrote from Milan. He later moved to Bologna in 1560. He had met Gessner earlier, in 1552, and contributed several pictures of plants according to Steiger.

***CAROLUS, Leonhardus**, (dates unknown) asked for a consultation by letter from Chur, apparently using Johannes Fries as an introducer.

***CASSA[N]DER, Georg**, (Jusel Cassandt, near Bruges, 1513 – Cologne, 1566) studied in Leuven and taught theology and Canon Law at Bruges and Ghent. He was called to teach in Cologne by Ferdinand I, and then Maximilian II. His religious views were moderate, and he attempted a reunion between Catholics and Reformers, by publishing several theological works.

***CHYTRAEUS, David**, was a correspondent of Gessner, who wrote to him in 1543. He thus seems a bit young to have been David Chytraeus (1530-1600), theologian from Rostock.

***CLAUSER, Christoph**, (Zurich, d.1552) studied in Cracow, Padua and Ferrara, where he got his Medical Degree. The son of an apothecary, he was appointed *Stadtarzt* of Zurich and patronised Gessner's career. He published mostly medical books and exchanged letters on medical cases with Gessner.

CLUSIUS [DE L'ECLUSE], Carolus, (Arras, 1524 – Leiden, 1609) studied law in Leuven, Genth and Wittenberg, then medicine in Frankfurt, Strasburg and Montpellier where he got his medical degree in 1559. He also travelled in his capacity as a botanist. Well supported by the Fugger, he came back to Augsburg in 1563, and after that left for the Netherlands, directed the Botanical Garden in Vienna and taught in Frankfurt, Leiden, etc. Gessner mentioned a letter he had received from him, discussing plants of Spain and promising more descriptions, in a letter to Aretius. Indeed, he features in Steiger's list of plant senders.

COEGELIUS, X, a physician from Isnia.

***COLLINUS, Caspar**, (b. 1520), from Sitten was an apothecary and a physician, as well as a prefect in the Canton of Wallis. He signed the *Liber amicorum* (LA30), contributed to the *Historia Animalium* and according to Steiger to Gessner's botanical enterprise, and published a work on the Thermal Baths of Wallis.

***CONES, Julius**, was a physician, who sent a case study on worms.

CONSTANTIN [CONSTANTINUS], Robert, (Caen, 1530 – Basle, 1605) studied some time with Julius Caesar Scaliger in Agen, and became a physician in Montauban, then in Germany. Excellent Hellenist, he wrote a very successful Greco-Latin dictionary. He

met Gessner on his way from Basle to Lyons in 1563, bringing in news from France. He features in Steiger's list of botanical providers.

CORTUSIO [CORTUSIUS], Giacomo Antonio (Jacobus), (1513-1603) was a botanist from Padua, who sent plants to Gessner, but also to other botanists, such as Mattioli. He also features in Steiger's list.

***CORZELIUS, X**, from Augsburg, was apparently interested in medical springs. Gessner wrote to him on the subject.

***VAN COUDENBERGHE [COLDENBERGIUS], Pieter**, (The Netherlands, 1520 – 1594) was an apothecary in Antwerp and the owner of a botanical garden. A letter is quoted in the *Icones Animalium*, and he took part in the edition of Valerius Cordus' works. He sent several consilia and recipes to Gessner, as well as plant paintings. He features in Steiger's list.

***COUSIN [COGNATUS], Gilbert**, (Nozeret, 1506 – 1567) studied law and theology in Dole, worked with Erasmus until 1535, then became a Canon in Nozeret, in Franche Comté. In 1558, he travelled to Italy with the archbishop of Besançon. He was accused of heresy and died in prison, leaving behind several religious and philological works.

***CRATO, Johannes**, (Breslau, 1519 – 1585) was the son of a landowner. He studied humanities and medicine in Breslau, Wittenberg, Leipzig and Padua. He practised for a while in Verona, went home to a position of town physician in Breslau, and, in 1560, of imperial physician to Emperors Ferdinand I and Maximilian II. In 1567, he was knighted, granted land in Ruckfertz, near Glatz, and began to assume both medical and juridical functions first over the Land of Rottweil, then over the Court. His sympathies for the Reformation earned him banishment from the Catholic court in 1576, but he was called back by Emperor Rudolf II the year after. Crato was the author of several important medical treatises and of many epistolary consultations and scholarly letters, published between 1594 and 1611.

CRATO, Godefric, was the son of Johannes. According to a letter Gessner wrote to his father dated 6 October 1560 (*Ep. Med.*, f. 6v), he was a student and wrote regularly to the town physician of Zurich.

CRATO, Friedrich, was another son of Johannes, named in a letter to his father dated 24 July 1564 (*Ep. Med.*, f. 20v).

***CULMANN [CULMANNUS], Johannes** studied medicine in Montpellier. He then became a physician to the Duke of Wurtemberg in Gippingen and Stuttgart. He signed the *Liber amicorum* in Easter 1559 (LA117) and belonged to Gessner's list of helpers in the *Historia Animalium*. He also helped forwarding the letters to friends in Esslingen, like Volmar or Vergerius.

***CURIONE, Coelio Secondo**, (San Chicico near Turin, 1503 – Basle, 1569) was a noted Italian Reformer, exiled by the Inquisition. He found refuge in Switzerland, as principal of the college of Lausanne and Professor of theology at Basle University. He nurtured an interest in botany, helped Gessner and was the mentor of Jean Bauhin. He signed the *Liber amicorum* (LA212), and features both on Gessner's list of helpers for animals and on Steiger's list.

CURTIUS, Matthias, a merchant from Lindau, possessed a botanical garden.

CURTIUS, Sebastianus, from Lindau, was quoted in a letter to Johannes Crato, dated 26 March 1564 (*Ep. Med.*, f 22r).

DALENVILLE, Nicolaus, from Chartres, was mentioned in the list of helpers of the *Historia Animalium*.

***DALECHAMPS [DALECHAMPIUS], Jacques**, (Caen, 1513 – Lyons, 1588) studied in Montpellier and took up a medical practice in Lyons. He published several medical works, (e.g. *Libellus de Peste*, 1552) and botanical texts (*Historia generalis plantarum*, Lyons, G. Rouille, 1586). He entered in discussions with Gessner regarding birds and pictures of plants.

DE MESNIL, Pierre, from France, was quoted in the list of helpers in the *Historia Animalium*.

DERNSCHWAMM [DERNSCHWANN], Johannes, (Bruges 1494 – Kőrmőcbánya, 1568) travelled widely in Germanic Europe and to the East (to Constantinople and Asia, with the delegation of the Habsburg Empire between 1553 and 1555) and brought back interesting manuscripts he sometimes shared with the Fugger family. A manager of the Fugger mines in central Slovakia, he was mentioned in the *Historia Animalium* as a helper. Gessner quoted a letter from him in the Chapter on *Huso*.

***DONZELLINI [DONZELLINUS], Girolamo (Hieronymus)**, (Brescia, ca 1513 – Venice 1587) taught medicine in Padua and published commentaries on Galien and Rhazes. He

then was recruited among the imperial physicians and went to Vienna. He contributed plant samples to Gessner's collection, and features in Steiger's list.

***DOUREZ, Valerand**, (Lille, s.d. – Lyons, ca. 1571) was an Flemish apothecary established in Lyons. He was quoted by Gessner several times in letters to Jean Bauhin. Gessner also dedicated one of his books to him. He features in Steiger's list of botanical furnishers.

DRYANDER [EICHMANN], Johannes, (Wetter (Hessen) 1500 – Marburg, 1560) studied in Erfurt, with Euricius Cordus, then in Bourges and Paris. In Paris, he taught mathematics and astronomy. He became a court physician to Archbishop Johannes von Metzenhausen in Koblenz. Afterwards, he took up a position as teacher of mathematics and medicine in Marburg. He belonged to the list of helpers of the *Historia Animalium*.

DU CHOUL, Johannes, from Lyons, was maybe the son of Guillaume du Choul (Lyons, 1496-1560). If so, he travelled to Rome around 1549-1551. A physician and a naturalist, he features in Steiger's list and was the author of a *Description of Mount Pilates* published with Gessner's *De raris et admirandis herbis*. He also gave considerations on various species of pigs.

***DUNO, Thaddeo**, (Ascona-Locarno, 1523 -Zurich, 1613) was an Italian physician, who was banned for his Reformed convictions in 1555. He fled to Zurich, where he continued to practise medicine with success. A good friend of Gessner, he signed the *Liber amicorum*, (LA75), in 1559. He published several works on the Scripture, as well as medical books and a collection of medical letters centred on the use of *oxymel* in 1555. Steiger mentions him as a provider of plants.

EGELLIUS [ECKEL], Carolus, a physician from Ravensburg, may have been a relative of Joachim Eckel, who studied medicine in Montpellier and Paris and was known to Erasmus. Carolus contributed to Gessner's *Historia Animalium*.

***ENGELBERG VON MASS, Daniel**, wrote in German from Chur to Gessner to explain the case of his niece suffering of migraine. *No other information on this correspondent.*

EPARCHUS, Antonius, from Corfu was either a professor of Greek in Venice or a merchant from Augsburg, and featured in the list of helpers of the *Historia Animalium*.

***EPISCOPIUS, Nicolaus**, (Weissenburg, 1501 – Basle, 1563) was a printer in Basle where he was associated with one of the sons of Froben. He printed Gessner's and Guilandinus' *De stirpium aliquot nominibus*, in 1557.

EPISCOPIUS, Nicolaus, the Younger, from Basle, the son of the aforementioned, was a friend of Theodor Zwinger, and a go-between between his father and Gessner.

***ERASTUS [LIEBLER], Thomas**, (Auggenen, 1524 – Basle, 1583) graduated in medicine in Bologna in 1552. He took up a position of Professor of medicine in Heidelberg in 1558, then taught Ethics in Basle from 1580 onwards. A noted adversary of Paracelsus, he was a constant correspondent of Gessner. In particular, he wrote a letter on the plague, which Gessner answered at some length and was published later. He signed the *Liber amicorum* (LA 18).

***ESTIENNE, Henri**, (Paris, 1528 – Lyons, 1598) was a printer in Paris, Geneva and Lyons, and belonged to a dynasty of printers. He perfected his education by several travels to Italy. A Reformer, he led a eventful existence, and received for a long while patronage from the Fugger family. With Gessner, he exchanged letters in Greek, a language he mastered excellently. He also printed Gessner's edition of Athenagoras, in 1557.

ESTUYCUS, Johannes, from England, was quoted in the list of helpers in the *Historia Animalium*.

***ETSCHENREUTTER, [ETSCHENREUTTERUS, ETSCHENREUTERUS] Gallus**, (Überlingen, fl. 1561-71), graduated in Bologna in 1561. He was a physician in Strasburg, then in Selestat by 1565, and an acquaintance of Gessner, for whom he signed the *Liber amicorum*, (LA155) in 1561 and to whom he gave plants and pictures of plants. A chemist, he also was an author of a letter on the philosopher's stone to Guilelmo Gratarolo, of a book on Baths and of various chemical books.

***FABRICIUS, Georgius**, (Chemnitz, 1516 – Meissen, 1571) studied in Chemnitz, then in Leipzig and travelled throughout Italy before coming to Strasburg in 1544 and establishing himself in Meissen in 1546, where he became the head of the princely School for the rest of his life. A poet, he was close to many humanists of the time, including Melanchthon and Camerarius. He edited ancient texts, wrote poetry, travel narratives, and history books. His name and letters were quoted several times in the *Historia Animalium*.

***FABRICIUS (MONTANUS, SCHMIED), Johannes**, (Bergheim 1527 – 1566) was sent to Zurich by his uncle, Leo Jud, when he was 7. He quickly forged strong links with Gessner, and collaborated abundantly with him by providing many samples of plants. A doctor in theology, he became in 1557 a Reformed priest in Chur, and died of the plague in 1566. He signed the *Liber amicorum* (LA148) and features in Steiger's list.

FALCONER [FALCONERUS], John, (d. in Ferrara, ca.1547) was a English medical student in Bologna with William Turner, and published the first British herbal. He featured among the contributors of the *Historia Animalium*.

FALLOPIA, Gabriele, from Padua was quoted as the sender of a picture of *tora* to Gessner in *De raris et admirandis herbis*. A well-known physician and naturalist, he directed the botanical garden of Padua.

FERRERIUS PEDEMONTANUS, Johannes, from Piedmont, was a physician who exchanged bird pictures with Gessner.

FLACCIUS ILLYRICUS, Matthias, (1520 – Frankfurt am Main, 1575) was a professor of Hebrew in Jena, and a theologian. He spent part of his life fleeing through Germanic Europe for religious reasons: he stayed in Wittenberg between 1541 and 1549, left for Jena in 1557, and then lived in various places in Germany. He was first a correspondent of Gasser, but soon was entangled in Gessner's network.

FONTANON, François, from Montpellier, studied medicine in Montpellier University around 1539. He was apparently personally known to Gessner, who met him during his studies. He contributed to Gessner's botanical enterprise, according to Steiger.

***FORER, Conrad**, (d. Wintherthur, ca. 1594) studied under Gessner's direction, then graduated in Avignon around 1555. He took up a town physician position in Winterthur, and frequently consulted Gessner about difficult cases. He contributed pictures of plants to Gessner.

***FRIES [FRISIUS, FRIESE, FRIESS], Johannes**, (Zurich, 1540 –1601) was the son of Johannes Fries the Elder, a good friend and contemporary of Gessner. He studied humanities and theology in Basle, whence he exchanged letters with Gessner. He first taught in Marburg, then in the Grossmünster in 1565 and was made a Canon in 1575.

***FRIES [FRISIUS, FRIESE, FRIESS], Johannes Jacob** (Zurich, 1547 – 1611) was the son of Johannes Fries the Elder and the brother of Johannes. He studied theology in Geneva, then taught philosophy and theology in the Grossmünster. Author of several books on philosophy, he also edited Gessner's *Bibliotheca universalis* in 1583.

***FRIES [FRISIUS, FRIESE, FRIESS], Johannes the Elder**, (Grüningen (Zurich), 1505 – Zurich, 1565) studied together with Gessner in Bourges and Paris. Around 1545, he travelled to Italy. He afterwards taught at the Grossmünster, and published a famous

Latin dictionary. Closely related to Gessner, he signed his *Liber amicorum* in 1563 (LA16).

FROBEN [FROBENIUS], Hieronymus, (Basle, 1501 – 1563) was a printer in Basle who worked with Nicolaus Episcopus. He published two works of Gessner, his edition of Antonio Musa Brasavola in 1543 and his edition of Galen in 1562.

FROSCHAUER, Christoph, (d. 1585) succeeded his uncle Christoph Froschauer the Elder in his printing trade in Zurich. He printed a large number of Gessner's publications, some posthumously, and used to convey his mail.

***FUCHS, Leonhardt**, (Wemdingen 1501 – Tübingen 1566) studied in Erfurt and Ingolstadt where he graduated in medicine in 1524, then practised medicine in Munich, Ingolstadt, and Anspach. Called to a chair of medicine in Tübingen University by the Duke of Wurtemberg, he taught there until his death. He published numerous books on botany and medicine, especially a *De historia Stirpium comentarii insignes* that earned him great scholarly renown, and placed him in direct competition with Gessner.

FUGGER, Johann Jacob, (1516 – 1575) from Augsburg was the son of Raimund Fugger. He owned the manuscript Gessner used for his edition of Aelianus, and was therefore the dedicatee of the book. He proposed to Gessner to be the preceptor of his sons, but the latter refused.

FUGGER, Anton, (Nuremberg, 1493 – Augsburg, 1560) was a member of the Fugger family and a patron of Gessner. According to a letter to Amerbach, Gessner exchanged letters with him around 1545.

***FUGGER, Ulrich**, (Augsburg, 1526 – Heidelberg, 1584) was the son of Raimund Fugger. He spent a few years in Italy, and then converted to Protestantism (the only one in the Fugger family). He maintained a long-lasting relationship with Achilles Gasser, in Augsburg, where Gessner probably met him. He exchanged plants with him, and features in Steiger's list of botanical providers.

***FULGONUS, Jacobus**, (Montilhensis - Paris) signed the *Liber amicorum* in 1558 (LA 49) and was quoted in letter to Dalechamps as a correspondent. According to Steiger, he contributed to Gessner's botanical works.

***FUNCK [FUNCKIUS, FUNCEIUS], Johannes**, matriculated in Montpellier in 1558 and was a town physician in Memmingen, around 1563. He was apparently a relative of Gessner, and his mother was living in Zurich. He signed the *Liber amicorum* between

March and April 1563 (LA 174) and between 1563 and 1565 represented the main relay on Gessner's mail route to Augsburg.

***GABLER [GABLERUS], Venerand,** (b. Nürtingen in Wurtemberg, fl. 1536-64,) studied medicine in Tübingen, then practised medicine and raised to the position of Dean of Tübingen University. He knew personally Gessner, whom he hosted in Tübingen in 1559, when he signed the *Liber amicorum* (LA 119). He also came to Zurich around 1563, where he lived at Stucki's house. He wrote to Gessner medical letters, case narratives, and a consultation by letter about his own case of hypochondriacal melancholy.

***GASSER [GASSARUS], Achilles Pirmin,** (Lindau, 1505 – Augsburg, 1577) was the son of Ulrich Gasser, surgeon to Emperor Maximilian I. He got his medical doctorate in 1528, and practised in Augsburg. He was the first to sign the *Liber amicorum* in 1555 and contributed plants to Gessner's enterprise. He published several medical works, and especially an edition of Hippocrates' *Aphorisms*. A testimony of his esteem, Gessner asked him to give his name to a plant.

***GELENIUS, Sigismundus,** (Prague, 1497 – Basle, 1554) studied in Pavia, Venice and Bologna, then went back to his hometown and to Basle in 1526, and became a corrector with Froben for Greek and Latin texts. He was also the author of a German-Czech dictionary. He was quoted in the list of contributors to the *Historia Animalium*, and signed the *Liber amicorum*.

***GERBELIUS, Nicolaus,** (Pforzheim, 1485 – Strasburg, 1560) studied law in Bologna, practised law, then became a professor of History in Strasburg University, where Gessner probably met him.

***GESSNER, Jacob,** (Zurich, 1527 – after 1573) was a cousin of Gessner and a printer. Indeed, together with his brother Andreas Gessner, he published several of Conrad's works.

GOBELIUS, Severinus, from Prussia was a court physician to the Duke of Prussia and sent amber to Gessner, according to a letter to Zwinger.

***GOBLER [GOBLERUS], Justin,** (St Goar (near Rheinfels), 1504 – Frankfurt am Main, 1567) studied law in Bourges, Erfurt and Mainz. He became counsellor to Duke Eric of Brunswick, to Lübeck city, then in Minden and Frankfurt am Main. Author of many books on law and on history, he wrote to Gessner, at least on storks.

***GRATAROLO [GRATAROLUS], Guglielmo**, (Bergamo, 1516 – Basle, 1568) studied and practised medicine in Padua. He left Italy for religious reasons for Strasburg (or Marburg), then Basle. There, he obtained a position at the university. He published several books on medicine and on alchemy. He signed the *Liber amicorum* (LA 78) in 1559 and exchanged plants and pictures of plants with Gessner.

GRAVIUS, Valentinus, a senator from Meissen, was mentioned in the list of helpers in the *Historia Animalium*, and probably was in contact with Georgius Fabricius.

GRIMAULT, Leodigarius [Léger], from Normandy, was a protestant pastor in Montbéliard and Montecheroux. He published a theological book in 1563 and features in the list of helpers of the *Historia Animalium*.

***GRÿLL [GRYLLUS], Lorenz (Laurentius)**, (Landshut, 1524 – Ingolstadt, 1560) studied medicine in Ingolstadt, where he got his doctorate in 1541. A physician and a professor of medicine, he received patronage from the Fugger family. In 1555, he met Gessner, as he signed the *Liber amicorum* (LA 9) He died quite young, and Gessner showed interest in his unfinished works.

GRYPHIUS, Andreas, from Lyons, was a member of the printing family and served as a relay for Gessner's mail, especially for Jean Bauhin.

GRYPHIUS, Antonius, from Lyons was a member of the printing family and served as an go-between between Gessner and Caspar Wolf when the latter was studying in Montpellier.

***GUALTHER [WALTHER, GWALTER], Rudolf**, (Zurich, 1522 – 1577) studied theology in Basle, Strasburg, Lausanne and Marburg. He took part in the religious disputes of the time, and successively married the daughters of Zwingli and of Thomas Blarer. A noted theologian, he became the rector (*antistes*) of Zurich after Bullinger. He was a student in Basle when he exchanged correspondence with Gessner.

***GUILANDINUS [WIELAND, GHILANDINI], Melchior**, (Königsberg, 1520 – Padua, 1589): was a botanist and naturalist. He travelled in Italy for his medical studies, then to Asia and Africa. In 1561, he succeeded his protector Gabriele Fallopi as the director of the botanical garden in Padua. He also taught botany and medicine in Padua University. Like Gessner, he entered into controversy with Mattioli, and with the Swiss scholar published *De stirpium aliquot nominibus* (1557) in order to counter some of Mattioli's

assertions. They exchanged botanical samples, before breaking off relations for an unknown reason. He also wrote commentaries on Pliny, Galen and Dioscorides.

GYBSON, Thomas, (Marpergh (Northtumberland), s.d. – London, 1562) was a printer and a physician interested in natural history and a friend of William Turner. He features in Gessner's list of helpers of the *Historia animalium*.

HALLER [HALLERUS], Wolfgang, (Zurich, 1525 – 1601) was a brother of Johannes Hallerus, and a pastor at Melsen, on Lake Zurich, then at the Grossmünster. He features in Steiger's list of botanical contributors.

***HAUNENREUTERUS [HAWENREUTTER], Sebaldus**, from Strasburg features in Steiger's list of botanical contributors. A letter to Gessner, proposing remedies against *urinae ardor* and preserved in MsS204c, suggests a medical profession.

HEDIO, Caspar, (Esslingen or Baden, 1494 – Strasburg, 1552) studied theology in Freiburg and Basle and became a court preacher in Mainz, then a pastor in Strasburg from 1523 onwards. He was related to Wolfgang Capito, Gessner's host in Strasburg. Gessner mentioned him in the *Historia Animalium*'s list of helpers.

***HENERCUS, Johannes**, was a physician from Lindau, who shared with Gessner links with Ulrich Fugger and Johannes Funck, as well as considerations on the treatment of blood spitting.

***VON HERBENSTEIN, FREIHERR Sigismund**, (Vipava, in Carniola (Slovenia) 1486 – 1566) studied philosophy and law in Vienna and entered a military career. He then received diplomatic appointments in the service of Maximilian I, often in Turkey and in Russia. He was mostly known for his works on Russia, and especially for his *Rerum Moscovitarum Commentarii* (1549). Gessner dedicated to him his *Mithridates; De differentiis linguarum*, Zurich, Froschauer, 1555.

***HEROLD [HEROLDUS], Hieronymus**, (Leipzig s.d. – Nuremberg, 1566) studied medicine in Leipzig, and got his doctorate in 1547. He then became an ordinary physician in Nuremberg, and signed the *Liber amicorum* (LA104) in 1558. A correspondent of Mattioli and Camerarius, he was also a constant correspondent of Gessner and helped him in his botanical project (features in Steiger's list).

HERWAGEN [HERWAGIUS] Johannes, (Waderdingen, 1497 – Basle, 1558) was a wealthy printer from Strasburg and apparently sent some pictures of birds to Gessner.

***HESS [HESSUS], Johannes**, (Nuremberg, d. 1564) was a town physician in his hometown from 1554 onwards. He also corresponded with Mattioli, and was a referee in the controversy between Gessner and Mattioli.

HIEL, Laurentius, (d. Jena, 1566) studied medicine in Jena where he got his doctorate in 1555. Four years later, he got a position as a Professor of medicine, and published a book on animals. He also contributed to Gessner's botanical projects, according to Steiger.

***HOLTZACH [HOLTZACHIUS], Johannes Cosmas**, (Basle, 1510 – 1595) was the son of a physician. He became town physician in Schaffhausen. He published especially annotations on Dioscorides. Gessner quoted him several times in his *Historia Animalium* and they exchanged an abundant correspondence on medical subjects. He signed the *Liber amicorum* in 1559 (LA 74).

HOPFSTETER, [HOECHSTETTER], Johannes Ludovicus, (fl. 1556-63), from Augsburg, studied medicine in Montpellier at the same time as Felix Platter (ca.1556), under Fontanon's patronage. He had previously been a student of Thomas Platter. He signed the *Liber amicorum* (LA43) after 1563.

HOPFSTETER [HOECHSTETER] Johannes Baptista (d. Augsburg, 1570), was an apothecary in Augsburg and in Vienna after 1564. He signed the *Liber amicorum* (LA70).

HORSTIUS, Gisbertus, from Amsterdam, was a physician in Rome, whence he sent information on animals to Gessner and apparently to several other naturalists, including Melchior Adam.

***HORTINUS, Michael**, (fl. 1563), was a physician from Heydel. He carried Gessner's letter to Johannes Jacob Frisius, who then resided in Geneva, and signed the *Liber amicorum* (LA 182) around 1563. He also sent several medical letters to Gessner, reporting for instance epidemic diseases.

***HOSPINIANUS [WIRTH], Johannes**, (Stein, near Schaffhausen, 1515 – Basle, 1576) studied rhetoric in Tübingen, and became a professor of Greek in Basle University in 1543, then of Rhetoric in 1544, of Logic in 1545 and Theology in 1546. He wrote numerous books on rhetoric and logic, and became a famous professor. Gessner sent him numerous Zurich students, especially Georg Keller.

HUERTADO DE MENDOZA, Diego, (Granada, 1503 – 1575) was a Spanish nobleman and politician. He had studied in Salamanca, Bologna, Padua, and Rome. He was an

ambassador in Rome and England, then stayed for a while in Venice where he became a patron to the Aldine publishing house and lent Greek manuscripts of his collections to various editors. Following a quarrel with a courtier, he was banished from court by Philip II, and spent the rest of his life in Granada, writing historical books and poetry. He shared with Gessner his library when the latter travelled to Venice.

***HUGO, Jacob, the Elder**, from Zurich, transmitted a letter from his son asking for medical advice.

***HUGO Jacob, the Younger**, was in Winingen when he wrote asking for medical advice to Gessner and Duno.

HUGUALDUS [HUGBALD], Ulrich, (Torgau, s.d. – Basle, s.d.) was a professor at Basle University. Gessner mentioned him in the list of contributors of the *Historia Animalium*.

***HUNZ ZU HÖRNG, Johannes**, sent a letter to ask for medical advice.

(*)JACOBUS, Petrus, may be a Spaniard mentioned in a letter Gessner wrote to Holtzachius.

***JACOBUS, Petrus**, was an apothecary in Zurich who features in Steiger's list of helpers and is mentioned several times in Gessner's correspondence. There is also one printed letter.

***JUD, Leo**, (Gemar (Alsace) 1482 – Zurich, 1542) studied medicine and theology in Basle. When Zwingli died, in 1523, he became a pastor at Sankt Peter Church, in Zurich. He published numerous theological texts, and was well known to Gessner who wrote to him as a student.

***KARPECKIUS [KATZBERG / VON REICHENBACH], Michael**, (d. 1568) was a Catholic prior in Reichenbach cloister, in Bayern. He converted to the Reformation and wrote to Gessner concerning religious matters, but also, apparently, botanical samples.

***KARSEMEISTER, Balthasar**, consulted Gessner regarding kidney stones.

***KELLER [CELLARIUS], Georg**, (Zurich, 1533 – 1603) counted among Gessner's disciples. He then studied in Paris and Padua where he got his medical degree. He later succeeded, together with Caspar Wolf, to Gessner's *Stadtarzt* position and taught medicine in Zurich.

***KELLER [CELLARIUS], Isaac**, (Basle, 1529 – Selestat, after 1577) was a Professor of theoretical medicine in Basle University between 1552 and 1577. After a financial

scandal, he became a *Stadtarzt* in Selestat, where he died. Gessner wrote for him an epistolary prescription for colic and he also features in Steiger's list of botanical senders.

KELNER [CELLARIUS], Thomas, (Brunschwig, fl. 1558-72) matriculated in Bologna University in 1558 and signed the *Liber amicorum* in 1558 (LA 155).

***KENTMANN, Johannes** (Dresden, 1518 – Torgau, 1574) studied medicine in various German-speaking cities (Leipzig, Wittenberg, Nuremberg), before he travelled to Padua and Bologna, where he obtained his Medical Doctorate in 1549. He went home via Zurich, and met Gessner the following year. He took up the post of *Stadtarzt* in Meissen, then in Torgau where he stayed until his death. Interested in botany and mineralogy, he possessed collections of plants and stones and published on natural history in 1556. He frequently exchanged letters with Gessner, which were published in 1584, in a fourth book of *Epistolae Medicinales*. He features in Steiger's list.

***KESLER, Samuel**, (d. 1590) was a pastor in Wintherthur and a patient of Gessner, whom he consulted for his headaches.

***KESSLER, Josias**, (Saint-Gall, 1527 – 1580) was a professor of Grammar, and a correspondent of Gessner and Bullinger. He produced the catalogue of Vadian's library.

***KOENEKE, Moisius**, from Rostock, wrote a letter to Gessner.

***KOTABERUS, Christophorus**, from Zurich, consulted Gessner on behalf of his wife, who suffered from pains when urinating.

LAURAEUS, Stephanus, from Amersfoort and later Augsburg, was a physician to Emperor Ferdinand. He met Gessner in Augsburg where he signed the *Liber amicorum* (LA 6).

LAVATER, Ludwig, (Schloss Kyburg, 1527 – Zurich, 1586) studied in Albis, Zurich, Strasburg Paris and Lausanne, before travelling to Italy. He was ordained in 1549, and became Vicar in the Fraumünster. A Reformer, he published many exegetical works. He married Bullinger's daughter, and became *antistes* of Zurich city, like his father-in-law.

***LINGOLT, Martsin**, consulted Gessner about his headaches.

***LISMANINUS, Franciscus**, was perhaps born in Corfu. He lived in Poland and in Königsberg where he promoted the Reformation together with Sigismundus Augustus. He was close to Sozino and a correspondent of Johannes Wolf.

LITHONUS, Simon, from Valais, featured in the list of helpers of the *Historia Animalium*.

LYDIUS, Martinus, (Lübeck, 1539 – Tübingen, 1601) signed the *Liber amicorum* during his *peregrinatio academica* (LA 197), and kept up the acquaintance through letters. Subsequently he became a professor of Theology at Franeker and the first rector of that University. He maintained correspondence with Joseph Scaliger, Lipsius, de Bèze, and others.

MALVETIUS, Johannes Franciscus, from Verona, was quoted in the Chapter on *tora*, in *De raris et admirandis herbis*, 1555.

MANGOLT, Gregor, (Constance, 1498 – after 1575) was mentioned in the *Historia Animalium*. After being a monk, he became one of the Reformers in Constance, as well as a bookseller, and entered in correspondence with Bullinger (1533-1540). In 1548, he was exiled to Zurich, where he met Gessner and made him privy to his manuscript work on fishes in the Bodensee. Through Gessner's intermediary, Mangolt's *Fischbuch* was printed in 1557 by Andreas Gessner. Mangolt is also the author of a Chronical of Constance.

MARSILIUS, Adamus, or Adrianus, an apothecary from Ulm originally from Dongen, in Brabant, was mentioned in the *Historia Animalium*, and signed the *Liber amicorum* in Ulm in 1559 (LA72).

MARTINUS, Andreas, from Rostock, features in Gessner's list of contributors to the *Historia Animalium*.

MARTIUS, X, from Nuremberg, became a correspondent of Gessner through Camerarius's intervention.

***MASSARIUS, Hieronymus**, (Vicenza, s.d. – Strasburg, 1564) was a physician who had to flee his hometown and took refuge in Switzerland, then in Strasburg where Zanchi recommended him to Wolfgang Musculus, and where he obtained a teaching job. A translator of Hippocrates and the author of some theological manifestos, he signed the *Liber amicorum* (LA52).

***MATTIOLI, Pietro Andrea**, (Sienna, 1500 – Trente, 1577) was an Italian physician and botanist. He studied medicine in Padua, then practised in Sienna. He left afterwards for Prague and became personal physician to the emperors Ferdinand I and Maximilian II. He is mostly known for his Commentaries on Dioscorides' *De materia medica*, which led him to exchange plants with Gessner and provoked many a controversy in early modern

Europe, including one with Gessner. He also published medical books, especially on *morbus gallicus* and two editions of his own *Epistolae medicinales*.

***MAYNARDUS, Augustinus** was an Italian ecclesiastic in Chiavenna, and a follower of Calvin. One of his letters is quoted in *De raris et admirandis herbis* (1555) in the chapter on *tora*.

***MOETELLUS [MAETELLUS], Adolfus**, from Valle Auduboronum consulted Gessner on a case of *urinae ardor*.

MOIBANUS, Johannes, (Breslau, 1527 – 1561 or 1562) was a physician from Breslau. Gessner knew him personally as he signed the *Liber amicorum* (LA 96). After his death, Gessner, helped by Gasser, completed his works on Dioscorides.

MOELLER [MOLLERUS], Henricus, (1528 -1567), from Witzenhausen (Hessen, Nassau), studied theology in Rostock and Wittenberg, then taught in Ulm and Danzig. He also was a courtier at the Swedish Royal Court. He wrote to Gessner and Simler together, whom he had met in Zurich as he signed the *Liber amicorum* (LA 213).

MONTESORO [MONTHESAURUS], Domenico (Dominicus), from Verona was a go-between for Gessner's correspondence, as mentioned in a letter to Jean Bauhin. He was also named in the list of helpers in the *Historia Animalium*.

***MONTISAURUS, Natalis**, probably a physician, sent a letter on dropsy, and is listed among the senders of plants by Steiger.

***MUNDELLA [MONDELLA], Luigi (Aloisius)**, was the town physician of Brescia, author of several books, especially some *Epistolae Medicinales* and editions of Galen. With Gessner he exchanged some letters, and pictures of birds.

MÜNSTER, Sebastian, (Ingelheim, 1488 – Basle, 1552) studied theology in Heidelberg and Tübingen. Converted to the Reformation, he taught in Heidelberg, then in Basle. His *Cosmographia Universalis* made his fame (Basle, 1544). Gessner named him in the list of contributors of the *Historia Animalium*.

***MUNZIGER [MUNZIGERUS], Heinrich**, (Basle, 1522 – s.l. after 1565) studied in France and Italy, especially in Pisa. Gessner's letter to Corzelius was also copied and sent to him. He was a physician in Augsburg. In 1555, Charles V ennobled him. He then became *Stadt-* and *Landphysicus* to the Bishop of Eichstadt.

***MUNZMEISTER, X**, perhaps from Zurich, was probably a physician. Gessner sent him a letter including a case narrative.

***MURALTUS, Martinus**, (fl. 1558) from Locarno, was a jurist. Gessner consulted him about the ways of getting money he had lent back. He was in touch with Paris Appianus, equally from Locarno and a fabric-maker in Zurich. He signed the *Liber amicorum* (LA 136).

***MURALTE, [MURALTUS], Johannes**, was an Italian surgeon who lived in Nuremberg.

MUSA BRASAVOLA, Antonio, from Ferrara, was a physician to Ercole d'Este, Duke of Ferrara. He was named among the contributors to the *Historia Animalium*.

***MUSCULUS, Wolfgang**, (Dieuze (Lothringen), 1497 – Bern, 1563) studied music and theology, then converted to the Reformed faith and left for Strasburg, where he became a pastor. In 1531, he went to Augsburg, a city which became the place where he returned regularly, in between two travels around Reformed Switzerland. In 1549, he took up the position of Professor of Theology in Bern. Musculus was personally known to Gessner, who had met him in Strasburg.

***MYCONIUS, Oswaldus**, (Lucerne, 1488 – Basle, 1552) studied and taught in Basle, where he married and met Erasmus. He then came to teach in Zurich in 1519 and joined Zwingli. There, he probably was one of Gessner's professors, before going back to Basle in 1531 to teach New Testament exegesis. He was the author of a translation from the Coran, and of several other theological texts.

NEGRI [NIGER], Francesco, (Bassano, c. 1500 – Cracow, 1563) was a monk who converted to the Reformation. He then travelled through the Graubünden, to Chiavenna where he met Augustinus Maynardus. He entertained links with Zurich religious figures, especially with Bullinger, and with Italians exiled to Basle, such as Coelio Secondo Curione. Around 1559, he went to Poland, and established himself near Cracow. With Gessner, he exchanged pictures of birds.

***NÜSCHELER, Heinrich**, from Zurich, was one of Gessner's correspondents during his *peregrinatio academica*. It is to him that Gessner first announced his wedding.

***OBRECHT, Didymus**, (from Strasburg, fl 1556-1606) studied medicine in Montpellier, and established a botanical garden in Strasburg Gessner was keen to emulate. He had signed the *Liber amicorum* in 1556, (LA 121).

OCCO, Adolph II, (Brixen, 1494, Augsburg 1572) was the adoptive son of Adolph Occo I, a famous court physician. He studied medicine in Italy and became town physician in Augsburg.

***OCCO, Adolph III**, (Augsburg, 1524 – 1606) was the third member of the Occo medical dynasty. He obtained a medical doctorate in Ferrara. An excellent Hellenist, he rapidly climbed the steps of the Augsburg medical system, and was named in 1564 the supervisor of all apothecary shops. He was ennobled by Maximilian II. In 1582, he became the perpetual substitute of Augsburg Medical college, but left these functions quickly. He then turned to numismatic publications, an activity that had fed his frequent epistolary exchanges with Gessner, for whom he composed an elegy when he died. The two men had met several times, especially around 1555 when Occo signed the *Liber amicorum* (LA63). Occo also features in Steiger's list of botanical helpers.

OLINGER [OLINGERUS], Paul, from Nuremberg, sent plants to Gessner, which blossomed in his garden.

***OPORINUS [HERBST], Johannes**, (Basle, 1517 – 1568) studied in Basle, then taught Greek at Basle University. He then set up a printer's shop, where he was the main Basle printer to publish Gessner's works.

***PARKHURST, John**, (Gilton (Surrey), 1511 – Norwich, 1574) was educated in Oxford, left England with the arrival of Mary Stuart, and settled in Zurich until 1560, where he signed the *Liber amicorum* (LA 26). Promoted to the position of pastor in Norwich, he wrote on his way to his new position, when he came through London.

***PEIER, Alexander**, was the son of the Consul of Schaffhausen and a former student of Gessner. He was quoted in the chapter on *tora*, in the *De raris et admirandis herbis*, as well as in the *Historia Animalium*.

PETRI [PETRUS], Heinrich, (Basle, 1508 – 1579) inherited his father Adam's printer shop and practised there from 1527. He studied in Sax. He printed several of Gessner's books.

PEUTINGER, Konrad, (Augsburg, 1465 – Nuremberg, 1557) studied law in Bologna and Padua, then became state secretary of Augsburg and Counsellor to Emperor Maximilian. Besides a substantial library, he left collections of natural history samples. He apparently communicated to Gessner on these topics, as some pictures in the *Historia Animalium* were sent by him.

***PICTOR [MAALER], Georg**, (Baden, 1500-1569/73) was court physician to the Archduke of Ensisheim and Professor of Medicine in Freiburg-in-Brisgau. He published several books in Basle, including

poems on animals. He exchanged recipes and *consilia* with Gessner, including one joint *consilium* on worms with Nicolaus Stocker.

PIPERINUS [POPERINUS], Christophorus, from Bern, was according to Simler's letter to Musculus one of Gessner's Bern correspondents. He apparently exchanged plant and bird pictures with Gessner, as he is quoted in Steiger's list and in the *Historia Avium*.

***PLACOTOMUS [BRETTSCHEIDER], Johannes**, (Münsterstadt, 1514 – Danzig, 1577) taught medicine from 1544 to 1550 in Königsberg, and from 1552 practised medicine in Zurich. In 1564, he was in Danzig, where Gessner wrote to him via Hieronymus Herold and Joachim Camerarius. Gessner dedicated to him a part of his edition of Valerius Cordus, the *Sylva Observationum variarum*. He also wrote a consultation by letter about his colleague's eye problems.

***PLATTER [PLATER], Felix**, (Basle, 1536 – 1614) was the son of Thomas Platter. He studied medicine in Montpellier, then returned to his hometown where he became a Professor of medicine and several times the Dean of the University. He also was a successful town physician in Basle, created a botanical garden and a school of anatomy. He signed the *Liber amicorum* in 1561 (LA 143) and frequently exchanged plants and recipes with Gessner. He is well known for several medical publications, including a collection of *Observationes*, and for his Diary and his important correspondence.

***PONTISELLA, Johannes**, (Chur, s.d. – 1574) studied theology in Zurich, where he also taught at the Grossmünster school. In 1544 he left for Chur, where, throughout various disputes and discussions, he remained a pastor with important responsibilities in the Reformed Church. He met Gessner in 1537 and kept constant epistolary contact with him.

***PORTUS, Franciscus**, (Rhetymos, Crete, 1511 – Geneva, 1581) studied in Padua and at the School of the Young Greeks, of which he became the director. He lost his position for religious reasons, and left for Modena, where he taught Greek, and Ferrara. In the course of various peregrinations, he met Gessner in Zurich in 1559, and signed the *Liber amicorum* (LA 83). He finally settled in Geneva, where he became a citizen in 1562 as well as a professor of Greek. He was one of the best philologists of the time and produced editions of Pindarus, Xenophon and Demosthenes.

***PRIUS, F. Alexander**, from Schaffhausen was a junior colleague of Gessner and consulted him.

DU QUESNOY [QUERCETANUS], Eustache (Eustathius), (Lille, fl. 1531-1559) studied medicine in Basle and Valence until 1537-38. Around 1545, he established himself in Heidelberg for a few years. He then went back to Geneva, and later Lausanne, where he stayed and taught medicine between 1551 and 1557. In epistolary contact with Hugwald in Basle, he published several medical books.

***DE RAPHAEL, Antoine**, from Draguignan, was a young Frenchman, who knew Gessner through the Bauhin family in Lyons. On his way from Montpellier and Lyons, he signed the *Liber amicorum* in August 1565 (LA 220), but he apparently already knew Gessner, as the only surviving letter Gessner wrote to him is dated on the day before his arrival in Zurich (*Epistolae* 1591).

***RAUWOLF [DASYLYCUS], Leonhardt**, (s.l., 1540 – Augsburg, 1596) studied medicine in Valence and Montpellier, under Rondelet's supervision. He led a traveller's life: through Germany, France, and Italy. Returning from Italy with Bauhin, he spent a few days at Gessner's in Zurich and signed the *Liber amicorum* (LA 176). He then remained in contact with Gessner and exchanged plants with him, as well as with Adolf Occo. In 1565, he established his medical practice in Augsburg, where he had married the daughter of Ambrosius Jung. In 1573 he was subsidised by his brother-in-law, a merchant named Melchior Manlich, to travel to the Near East whence he returned full of observations he later consigned to a book, *Aigentliche Beschreibung der Raiß inn die Morgenländerin*, Laugingen, L. Reinmichel, 1582. He later settled in Augsburg, before leaving for Hungary.

REYFFENSTEIN, Johannes Wilhelm, (1520 – 1575) was a humanist, from a family of scholars living in Stollberg. He signed the *Liber amicorum* (LA 4) and later, in 1562, came to Zurich. He was several times mentioned in Gessner's correspondence with Achilles Gasser as he for instance sent a Gothic alphabet.

RHETICUS [VON LAUCHEN], Georg Joachim, (Feldkirch, 1514 – Kassa, 1574) studied in Zurich, Wittenberg, Nuremberg, and Göttingen. Aged 22, he taught astronomy and mathematics in Wittenberg, and adhered to Copernician ideas. He subsequently withdrew his support, and led a instable life, from Nuremberg to Leipzig, apparently via Silesia, where Gessner used his name to recommend himself to a potential patron.

***RIBITT [RIBITTUS], Jean (Johannes)** succeeded to Gessner as the Chair of Greek in Lausanne. They had met there between 1537 and 1540. He left a manuscript book where he had copied down the letters exchanged with Wolfgang Musculus, Robert Estienne, and Gessner, with whom he discussed about fishes.

RIHEL [RIHELIUS], Josias, (Strasburg, fl. 1558-1593) was the son of printer Wendelin Rihel, and a printer himself.

***RITTER [ARCHIPOOS], Matthias**, (Frankfurt am Main, 1526 – 1588) studied in Wittenberg. Between 1545 and 1549, he followed younger pupils from a rich and noble family, the Holtzhaugen, to Strasburg, when Gessner received his Greek letters. He also travelled with them to Paris and Poitiers, then went back to Frankfurt, where he assumed various positions as a pastor. He later authored several religious pamphlets.

***RONDELET [RONDELETTIUS], Guillaume**, (Montpellier, 1507 – 1566) studied in Montpellier and became the personal physician of Cardinal of Tournon, with whom he travelled in Italy and the Netherlands. He then took up the Chair of medicine in Montpellier University, where Gessner met him and became his pupil. In 1556, he became the Chancellor of the Faculty. He published a famous book on fishes, *Universae aquatiliū historiae pars altera*. Lyons, Mathias Bonhomme, 1555, which Gessner used substantially in his own *Historia Animalium liber IV*, as well as medical works. The two men remained in epistolary contact for years, using as couriers Zurich students coming to and from Montpellier.

ROSTIUS [RUOST], Thüring, was perhaps quoted in a letter to Johannes Crato, (*Ep. Med.*, f. 22r) as one of Gessner's correspondents. He was a former monk from the neighbourhood of Berne, converted to the Reformation, who became a pastor and a professor of theology in Berne. He signed the *Liber amicorum* (LA 129)

***SAMBUCUS, Johannes**, (Tyrnau, 1531 – Vienna, 1584) studied in Vienna, Leipzig, Wittenberg, Ingolstadt and Paris. He then travelled through Europe, especially through Italy and the Netherlands, and studied medicine in Padua, where he graduated in 1555. He established his medical practice in Vienna, and is mostly known for his books of Emblems.

***SCALIGER, Sylvius Caesar**, (from Agen) was the son of the humanist Julius Caesar Scaliger (1484 – 1558). When he wrote around 1561 to Gessner, Scaliger claimed his acquaintance with Robert Constantin.

SCHEGK [SCHENK, SCHENKIUS, DEGEN], Jakob, (Schöndorf, near Stuttgart, 1511 – 1587) studied theology and medicine in Tübingen. He got his doctoral degree in 1539, and from then on practised and taught medicine in Tübingen University, where he was very popular with students. He was a moderate Lutheran. Gessner mentioned him twice, once in a letter to a patient from Tübingen, recommending him as a good colleague to explain properly his advice, and the second time in 1563 asking Hans Wilhem Stucki to pass his greetings to him.

***SCHLEGKURZ, X**, (*no information was found on this correspondent*)

SCHNEEBERGER [SCHNEEBERGERUS], Anton, (1530-1581) was the great-grandson of a Bavarian physician having migrated to Zurich. He studied in Zurich, under Gessner's supervision, especially Greek, then left for Poland in 1553 to study in Cracow. He finally took his doctorate in medicine in Paris, then established his medical practice in Cracow. From there, he sent to Gessner rare plants and animals' descriptions, and even more importantly put him into contact with several Polish patrons.

SEILER [SEILERUS], Geryon, a physician from Augsburg, was quoted in the list of helpers of the *Historia Animalium*.

SEILER [SEILERUS], Gottfried, from Augsburg, was the son of Geryon, and contributed a picture and a description to the *Historia Avium*.

SEILER [SEILERUS], Raphael, (Augsburg, s.d. – 1572) was the son of Geryon and the brother of Gottfried. He was an assessor at the Kanzlergericht, the tribunal of the Chancellor. Protected by the Fugger, he edited in Basle in 1553 a discourse by Demetrios Kydones (around 1323-1397/98), *Τοῦ Κυδωνίου Περὶ τοῦ καταφρονεῖν τὸν θάνατον. Ἑρμεῖου φιλοσόφου Διασυρμὶς τῶν ἑξω φιλοσοφῶν. Cydonij de contemnenda morte Oratio. Hermiae philosophi irrisio gentilium philosophorum*, Basle, Oporinus, 1553, and was quoted in the *Historia Animalium*'s list of helpers.

SELD [SELDIUS], Georg Sigmund, (Augsburg, 1516 – Vienna, 1565) studied law in Augsburg, Ingolstadt, Padua, Bologna, Bourges, and Paris. He became around 1550 the Imperial Vice-chancellor for Charles V, Ferdinand I and Maximilian II. Gessner named him several times as a correspondent in letters to Gasser.

***SEMAN, Maximilian**, was a correspondent from Strasburg.

SIGHART, Georg, was an apothecary in Augsburg, who probably studied under Johannes Jakob Clauser's direction, then settled in Augsburg. Gessner mentioned him often in his correspondence, and he signed the *Liber amicorum* (LA 132)

***SIMLER [SIMMLER, SIMLERUS] Josias**, (Kappel, 1530 – Zurich, 1571) studied in Zurich under his godfather, Heinrich Bullinger, and later in Basle and Strasburg. He became a pastor in the Canton of Zurich, then taught New Testament exegesis, from 1552, in the Grossmünster school, and from 1560 onwards, theology. He is mostly known for his *De alpibus commentaries* (Zurich, 1574) as well as for his historical work on his homeland. Linked, like all promising Zurich youngsters, to Gessner, he published his *Vita* and prepared the edition of his correspondence.

SITTARD [SITTARDUS, SINARDUS], Cornelius, (Cologne, s.d. – Nuremberg, 1550) studied in Rome, travelled through Italy with Valerius Cordus, and established himself as a physician in Nuremberg. He was also a correspondent of Camerarius, Crato, and Herold. He contributed to Gessner's *Historia Animalium*.

SOHNEBERGER, X: *no information available on this correspondent.*

***SOZINO [SOZINUS] (Cornelio, Camillo, Celso, Fausto)** were brothers and nephews of Lelio Sozino.

***SOZINO [SOZINI, SOZINUS], Lelio**, (Sienna, 1525 – Zurich, 1562) was an Italian Reformer, born into a family of jurists and himself trained as a jurist. He left Italy in 1548 and led the life of a religious exile, living in Geneva, Basle, Zurich, and Wittenberg. In contact with the greatest theologians of the time (especially Melancthon and Calvin, who gave him letters of introduction to the Courts of Vienna and Cracow), he went back to Italy in 1550-51, then returned to Zurich, where he became an intimate of Bullinger. In 1554, he made "incautious remarks" about faith, and was consequently attacked by Calvin and questioned by Bullinger (satisfactorily) the year after. He contributed to Gessner's *Historia Animalium*, and Gessner sent at least one letter to his family and him.

SPEICHER, Nicolaus, (from Strasburg) was an apothecary and features in the list of contributors of the *Historia Animalium*.

STENGEL, Lukas, (Augsburg, 1523 – 1587) studied medicine in Padua where he obtained his doctorate in 1549. Established in Augsburg, he published several medical books, including some together with Adolf Occo.

- *STOCKER, Nicolaus** was probably a physician, who sent a *consilium* to Gessner together with Georg Pictor.
- *STUBIUS, Petrus** might have been an apothecary and sent news about an epidemic of *cephalea epidemica contagiosa*. Apparently, he knew Gessner personally.
- *STUCKI, Hans Wilhem**, (Toss, near Zurich, 1542 – Zurich, 1607) was a member of one of the wealthiest families of Zurich. He studied in his hometown, then in Lausanne, Strasburg, and Paris, and finally in Tübingen, whence he exchanged letters with Gessner. Linked to the Calvinists, he was a theologian and taught at the Grossmünster in Zurich from 1571 onwards. At the end of his life, he was one of the notables of the city, as well as a well-known humanist.
- STUPPA, Antonius**, from Retie, was quoted in Gessner's list of contributors to the *Historia Animalium*.
- SUFZ ROLITZ, Florians**, from Warsaw, featured in the list of helpers to the *Historia Animalium*.
- *SUSLIGAR, Florian**, from Strasburg, featured in the list of contributors to the *Historia Animalium*.
- THANMYLLERUS (Junior), Johannes**, a surgeon from Augsburg, was quoted in Gessner's list of contributors to the *Historia Animalium*.
- *TOXITES [SCHÜTZ], Michael**, (Storzinger, in the Graubunden, 1515 – Hagenau, 1581) studied in Pavia and Basle. Between 1542 and 1544, he taught in Strasburg, and afterwards took up a position of professor of Poetry in Tübingen. He travelled to France and Italy, and became in 1564 a physician in Strasburg, then town physician in Hagenhau from 1572 onwards. He seemed to have been a Paracelsian physician. With Gessner, he exchanges poems and Greek letters.
- *TURNER [TURNERUS], William**, (Morpeth, Northumberland, 1510 – London, 1568) studied in Cambridge between 1526 and 1533. Converted to the Reformation, he was imprisoned for two years, then left for Europe. In Italy, in Ferrara or Bologna, he obtained his doctorate of medicine, then came back in 1547 to England where he became personal physician to Edward, Duke of Somerset, while exercising some clerical magistracies. When Queen Mary came to reign, in 1553, he left again for Weissenburg in Bayern, where he practised medicine. He came back with Queen Elizabeth's accession in 1558. Interested in botany, Turner exchanged samples and stories with Gessner.

Several times quoted in the *Historia Animalium*, he also was the addressee of a printed letter that listed Gessner's published books.

***URSINUS, Zacharias**, (Breslau, 1534 – Neustadt-an-der-Haardt, 1583) studied in Wittenberg with Melanchthon, and met Crato there. Then he went to Heidelberg, Strasburg, Basle, and Geneva. Between 1558 and 1560, he took up a teaching appointment in Breslau, and left for religious reasons for Zurich where he had already signed the *Liber amicorum* (LA 109) in 1558, and where he stayed in 1560-1561, probably in good terms with Gessner. In 1561, he was called by the Elector to Heidelberg, where he got his theological doctorate in 1562, and taught and officiated there until 1578 when he left for Neustadt. His letter to Gessner was written from Frankfurt.

***VADIANUS [VON WATT] Joachim** (St Gall, 1484 – 1551) studied in Vienna where he obtained a chair of poetry, then went back to medical studies. He was a promoter of the Reformation in St-Gall, where he occupied the position of town physician and became the Burgermeister of the city.

***VALDANI, Josias**, was perhaps a physician, who sent a letter concerning, at least partly, catharr, *but no other information was found about him*.

***VALGRISI [VAUGRIS], Vincenzo (Vincent)**, (Charly, near Lyons, ca 1495 – 1573) was a printer, who started his career in Lyons, but established himself in Venice in 1532 and later in Rome. Gessner quoted him in the list of helpers of the *Historia Animalium*.

VERGERIUS, Petrus Paulus, (Capodistria, 1498 – 1565) had studied law and been a papal nuncio in Vienna and Bishop of Capodistria. He then converted to the Reformation (around 1549) and preached in Rhaetia. He settled in Tübingen, under Duke Christopher of Wittenberg's protection. He also had important links with Poland, where he spent some time at Court. Vergerius was a patient of Gessner, known to Culmann who advised him as well. He promised to send a catalogue of books by Scalichius, as well as a pamphlet from him. Apparently, he met Gessner in 1563.

VINMAN [VINMANNUS], Petrus, from the Guelders, in the Netherlands, studied medicine in Bologna. The letters he exchanged with Gessner transited through Basle and Theodor Zwinger's hands, and he commented largely on Zwinger's books. In 1559, he had signed the *Liber amicorum* (LA 87).

***VIRET, Pierre**, (Orbe, 1511 – Orthez, 1571) was a Reformer, who travelled through Europe to preach the ideas of the Reformation. After studies in Paris, he had his share

in the great disputes of the Reformation, taught in Lausanne, where he possibly met Gessner, then preached in Geneva, Nîmes and in 1563, Lyons, where he was when Gessner wrote to him, according to a letter to Jean Bauhin. Gessner also dedicated his *Errores Ulyssi* to him.

***VOLMAR [VOLMARUS], Johannes**, was an apothecary in Esslingen, around 1540-1575, where he received Gessner's letters through Johannes Culmann's help. Interested in questions of acid springs, he apparently exchanged correspondence with Gessner on the subject.

***VON MARBURG X**, was a patient of Gessner, from Tübingen.

***VULTEIUS, Justus** (Wetter (Hesse), 1529 – Marburg, 1575) studied theology in various places – Marburg, Strasburg, Erfurt, Wittenberg, Leipzig, and Zurich. He lived several years in Basle as a translator from Greek, then went to Frankfurt-am-Main, Flanders, Paris, Lausanne, and back to Wetter. There he took over the School, until he was appointed in 1560 as a professor of theology, and in 1572 as a professor of Hebrew in Marburg.

***WILLIGER, X**, was probably a physician, who wrote jointly with Caspar Wolf a letter on Hernia (MsS204c, 124v).

***WIRSUNG [WIRFUNG] Philip**, was a physician from Augsburg, who studied in Padua. He may have been a relative of the pharmacist Christoph Wirsung (Augsburg, 1500 – Heidelberg, 1571) and of David Wirsung (who studied medicine in Basle fl. 1570-76). He signed the *Liber amicorum* in 1559 after a meeting with Gessner where he showed him a hoof of *alces* and exchanged ideas about remedies.

***WOLF [WOLPHIUS], Caspar** (Zurich, 1532 – 1601) studied medicine in Montpellier and Orleans. He then practised medicine in Zurich, where he was Gessner's assistant as town physician, and succeeded to the position. Besides a small number of medical publication, he edited several posthumous works of his predecessor, among which the *Epistolae Medicinales* in 1577.

WOLF [WOLPHIUS], Heinrich, (Nuremberg, 1520 – 1581) was the younger brother of Hieronymus Wolf. He studied in Nuremberg, Tübingen, and Strasburg, then became town physician in his hometown.

- *WOLF, Johannes** (Zurich, 1521 – 1571) studied in Marburg with Rudolf Gwalther and Wolfgang Haller. He preached at the Fraumünster of Zurich, then became a professor of theology.
- *WYDT, Leon** was a patient of Gessner, related to Johannes Frisius.
- *ZANCHI [ZANCHIUS], Girolamo (Hieronymus)** (Alzano, near Bergamo, 1516 – Heidelberg, 1590) studied classics in Bergamo, then in Lucca, where he met Petrus Martyr Vermigli, and in Bologna where he took his doctoral degree. He converted to the Reformed faith. He fled Italy around 1550, and established himself in Geneva. In 1553, he was recruited as a Professor of the Old Testament in the Strasburg academy. He signed the *Liber amicorum* (LA79) and gave Gessner some talc. During his studies in Italy and trips to France, he had gathered an important collection of plants, and Gessner was anxious to get a catalogue of his rarest specimens. He returned to Chiavenna until 1567, when he was called by the Elector Friedrich III to be a professor of theology in Heidelberg. When Friedrich died, his son sent away all professors of the Reformed faith, and Zanchi went to Neustadt-an-der-Haardt to take on a professorship in New Testament. He died during a visit to Heidelberg in 1590, the author of several theological books.
- *ZERCHINTA (ZURKINDEN), Nicolaus** (Bern, 1506 – 1588) was a statesman (chancellor) of Bern. He exchanged several letters with Gessner and other scholars from Reformed Switzerland, such as De Bèze and Bullinger. Gessner dedicated to him the *De remediis secretiis*.
- *ZU WÜFLINGEN, X** (b. before 1547) was an eighteen-year-old epileptic woman, for whom Gessner wrote a consultation by letter.
- *ZWINGER [ZWINGGER], Theodor** (Basle, 1533 – 1588) was the nephew of the printer Oporinus, and the stepson of Conrad Wolffhart, or Lycosthenes, who taught grammar and dialectic in Basle. He studied first with Thomas Platter, then entered, in 1548, Basle University, travelled to Lyons, where he worked in a printer's shop, and Paris. He studied medicine in Venice and obtained a doctorate in Padua, in 1559. He apparently maintained a frequent correspondence with Gessner, paid him a visit in 1560 and signed the *Liber amicorum* (LA113). In 1565, he became a professor of Greek at Basle University, taught Ethics, theoretical medicine and was several times Rector of the University. A famous physician, the author of medical books and editor of ancient texts, he is mostly known for his *Theatrum Vitae Humanae*.

***ZWINGLI, Ulrich,** (Wildhaus, 1484 – Kappel, 1531) studied theology in Vienna, Basle and Constance. He first had a Catholic career as a priest in Glaris, and later in Zurich Grossmünster, where he established himself. He converted to the Reformation, and from then on was an important Reformer, who directed Zurich affairs while renovating its religion. Gessner wrote to him the year before his death to ask for subsidies.

APPENDIX III: GESSNER'S CORRESPONDENCE

NETWORK – COMPLEMENTS

Section 1: Complementary elements on Gessner's correspondents

Young and old

The recruitment of Gessner's correspondents changed over time. Younger and younger, Gessner's correspondents provided him with an access to remote places and their own outreach.

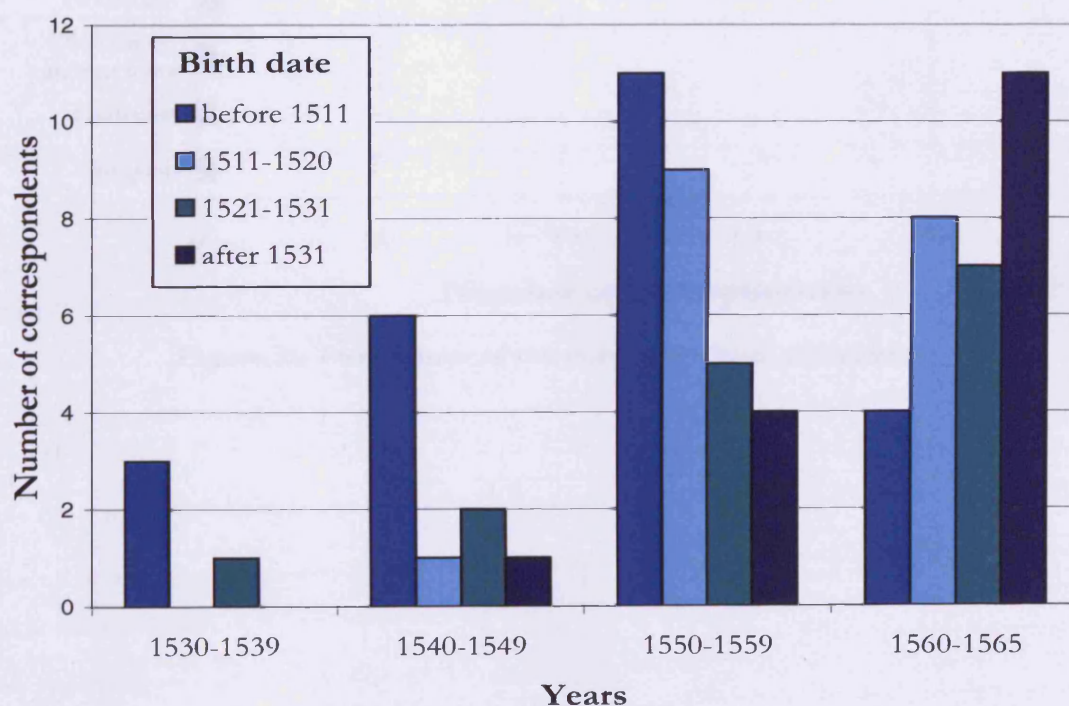


Figure 20: Age repartition of the correspondents

Professional anchorage: Professions and activities in Gessner's correspondence network.

This graph indicates the professions exercised by Gessner's correspondents at the time when they were susceptible to correspond with Gessner. Some correspondents appear in more than one categories, because professional boundaries were fluid and being a Reformer, a teacher and a physician was perfectly possible.

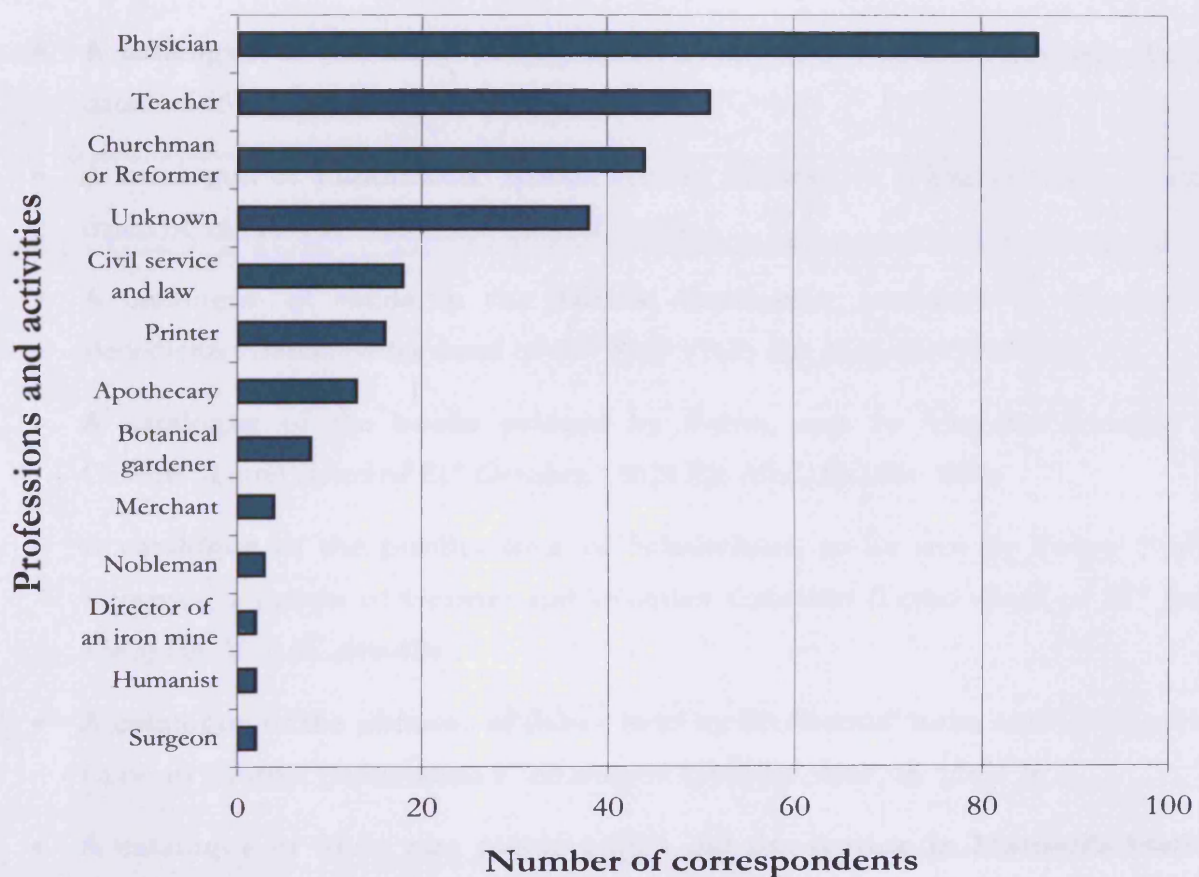


Figure 21: Professions of the correspondents of Gessner

**Section 2: The problem of locating:
a list of catalogues exchanged by Gessner and his
correspondents**

- **A catalogue of fishes living in the Rhine**, sent by Johannes Hospinianus to Gessner, (Letter dated of 5th August 1558) *Ep. Med.* ff. 102r-v
- **A catalogue of his dried plants**, asked by Gessner from Felix Platter, (Letter dated of 16th January 1559) *Ep. Med.*, ff. 97v
- **A catalogue of Paracelsius' works**, sent by Gessner to Johannes Crato, (Letter dated of 16th August 1561) *Ep. Med.*, ff. 1r-2v
- **A catalogue of seeds in the *Hortis Germaniae***, promised by Gessner to Benedictus Aretius (letter dated of 27th May 1562) *Ep. Med.*, ff. 117v-118r
- **A catalogue of the books printed by Perna**, sent by Theodor Zwinger to Gessner (Letter dated of 21st October 1562) *Ep. Med.*, ff. 106v-107r
- **A catalogue of the publications of Schalichius**, to be sent by Petrus Paulus Vergerius, a patient of Gessner and Johannes Culmann (Letter dated of 25th June 1563) *Ep. Med.*, ff. 44v-45v
- **A catalogue of the pictures of fishes held by Moibanus' heirs** sent by Johannes Crato to Gessner (letter dated 1st of August 1563) *Ep. Med.*, ff. 12v-13r
- **A catalogue of thirty rare plants which did not feature in Mattioli's books**, made by Joachim Camerarius, and sent to Crato and Gessner (Letter dated of 21st February 1564) *Ep. Med.*, ff. 16r-17r
- **A catalogue of the plants growing in Zwinger's garden**, sent by Zwinger to Gessner (letter dated 7 April 1564) *Ep. Med.*, ff. 107r-v
- **A catalogue of the books printed in Augsburg, in Latin or in any other language**, asked for by Gessner from Adolf Occo (Letter dated 7th January 1565) *Ep. Med.*, ff. 59v-61v

- **A catalogue of the books printed in Ingolstadt, in Latin or in any other language**, asked for by Gessner from Adolf Occo (Letter dated 7th January 1565) *Ep. Med.*, ff. 59v-61v
- **A catalogue of coins and medals owned by Johannes Frisius**, sent by Gessner to Adolf Occo (Letter dated 3rd April 1565) *Ep. Med.*, ff. 69v-73v
- **A catalogue of coins and medals owned by Josias Simler**, sent by Gessner to Adolf Occo (Letter dated 3rd April 1565)) *Ep. Med.*, ff. 69v-73v
- **A catalogue of Greek books included in Augsburg library's catalogue by the Senate of the city**, and sent by Occo to Gessner (Letter dated 3rd April 1565)) *Ep. Med.*, ff. 69v-73v
- **A catalogue of Rauwolff's dried plants, sent by Rauwolf to Gessner, mentioned in a letter to Occo** (Letter dated 3rd April 1565)) *Ep. Med.*, ff. 69v-73v
- **A catalogue of the rarest and most ancient books owned by Adolf Occo and his father**, sent by Occo to Gessner (Letter dated 5th May 1565)) *Ep. Med.*, ff. 62r-63r
- **A catalogue of the books printed by Perna**, sent by Gessner to Adolf Occo, (Letter dated 5th May 1565)) *Ep. Med.*, ff. 69v-73v
- **A catalogue of books printed in Paris**, sent by Hans-Wilhelm Stucki to Gessner (Letter dated 29th August 1565)) *Ep. Med.*, ff. 124v-125r
- **A catalogue of plants** sent by Johannes Cosmas Holtzach to Gessner (undated letter) *Ep. Med.*, ff. 82v-83r
- **A list of Galen's translators prepared for publication**, sent by Zwinger to Gessner, (undated letter) *Ep. Med.*, ff. 106r-v

Section 3: Specialising networks: Exchanging material.

These graphs indicate the material mentioned in Gessner's printed letters, for two correspondents: another young physician, Theodor Zwinger, who possessed many contacts within the Basle printing world, and Johannes Cosmas Holtzach, a fellow physician in Schaffhausen, who belonged to Gessner's generation. The case of Occo is presented in Figure 9.

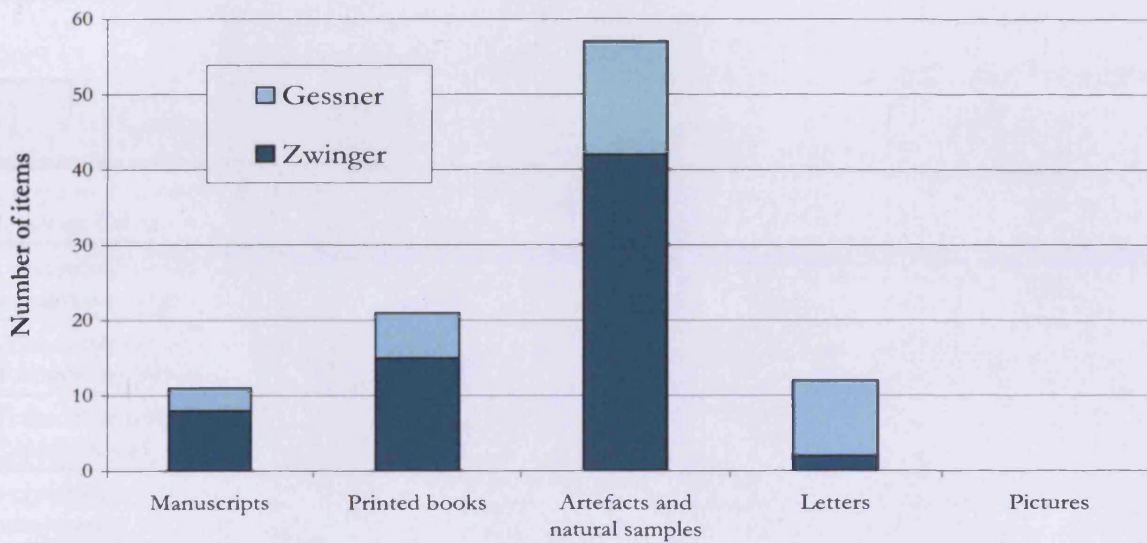


Figure 22: Material exchanges between Zwinger and Gessner

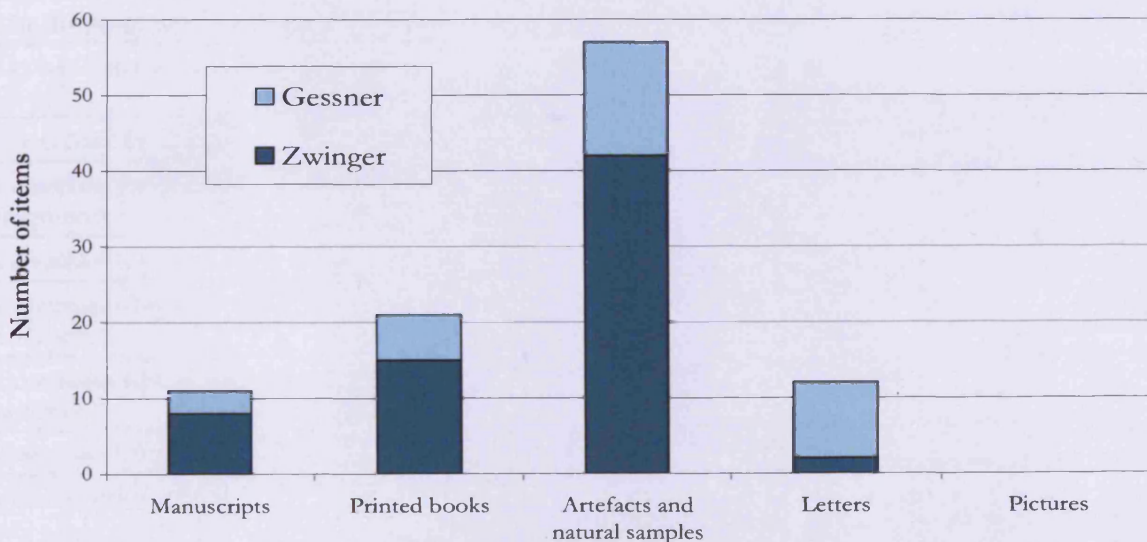


Figure 23: Material exchanges between Holtzach and Gessner

APPENDIX IV: FROM CONSULTATIONS TO CASES

Section 1: Consulting at a distance: Gessner's epistolary consultations in the *Thesaurus Medicinae Practicae*

Letter	Sender	Addressee	Date of sending	Shelves Pages
A copy of a <i>consilium</i> of Helideus for headaches	Johannes Crato	Conrad Gessner		MsS204a 39-41r-v
A consultation for headache or migraine (capitis dolor)	Samuel Kesler	Conrad Gessner	1562	MsS204a 42r
A consultation for headache or migraine (hemicrania)	Samuel Kesler	Conrad Gessner	18/01/1562	MsS204a 42v
A consultation for headache (Capitis dolor)	Martsin Lingolt	Conrad Gessner		MsS204a 48v
A consultation for migraine (hemicrania) and pleurisy	Jacob Hugo, the Younger	Jacob Hugo, the Elder	04/11/1561	MsS204a 51r
A consultation for headache and migraine (capitis dolor hemicrania)	Daniel Engelberg von Mass	Conrad Gessner	12/05/1562	MsS204a 51v
A consultation on headache post drinking	Petrus Stubius	Conrad Gessner	28 May	MsS204a 54v
A consultation on spasmus	Fridolin Brunner [Fontinus]	Conrad Gessner	31 December	MsS204a 94r
A <i>consilium</i> for epilepsy	Conrad Gessner	Unknown		MsS204a 126r
A <i>consilium</i> for epilepsy (fragment)	Conrad Gessner	unknown		MsS204a 129r
A <i>consilium</i> for epilepsy	Conrad Gessner	von Marburg, ?		MsS204a 133r-135v
A consultation for epilepsy (butcher)	Conrad Forer	Conrad Gessner		MsS204a 135v
A consultation for epilepsy (butcher)	Conrad Forer	Conrad Gessner		MsS204a 136v
A <i>consilium</i> for epilepsy	Conrad Gessner	Conrad Forer		MsS204a 137r
A <i>consilium</i> for epilepsy	Conrad Gessner	The sister of a Mann zu Wülflingen		MsS204a 147r-148r

Letter	Sender	Addressee	Date of sending	Shelves Pages
A consultation for epilepsy (fragment)	Georg Pictor	Conrad Gessner	10/10/1550	MsS204a 150r-151v
A <i>consilium</i> for a disease of the eyelids (fragment)	Jean Bauhin the Younger	Conrad Gessner		MsS204a 205r
A consultation for scrofula (Botium / Strumae)	Hieronymus Brixinus	Conrad Gessner	22/12/1561	MsS204a 273v
A <i>consilium</i> for asthma	Conrad Gessner	Unknown		MsS204b18r
A consultation for asthma	unknown	Conrad Gessner	22/01/1546	MsS204b 18v
A <i>consilium</i> for asthma (fragment)	Conrad Gessner	unknown		MsS204b 22r-v
A consultation for asthma	Alexander Peier	Conrad Gessner	16/05/1554	MsS204b 23r
A <i>consilium</i> for blood spitting (<i>sanguinis sputum</i>) (fragment)	unknown	Conrad Gessner		MsS204b 24v
A consultation for orthopnoea	unknown	Conrad Gessner	30 March 1561	MsS204b 32r
A consultation for pleurisy	Johannes Hunz zu Hörng	Conrad Gessner		MsS204b 42r
A <i>consilium</i> for colics	unknown	Conrad Gessner		MsS204b 143r
A <i>consilium</i> for colics	Isaac Keller	Conrad Gessner	14/11/1556	MsS204b 146r
A consultation for colics	Leon Wydt	Conrad Gessner	04/06/1562	MsS204b 153r-v
A consultation for colics	Leon Wydt	Conrad Gessner		MsS204b154r-v
A consultation for a melancholic man (<i>spleniticus</i>) (fragment)	Johannes Fabricius Montanus	Conrad Gessner		MsS204b 175v
A fragment of a <i>consilium</i> for worms	Georg Pictor	Conrad Gessner		MsS204b 177r -v
A <i>consilium</i> for worms	Caspar Wolf	Conrad Gessner		MsS204b 179r-180v
A <i>consilium</i> for jaundice (<i>icterum</i>)	Conrad Gessner	Balthasar Karsemeister		MsS204b 225r-225v
A <i>consilium</i> for <i>cachexia</i>	unknown	Andreas Gessner		MsS204b 235r
A <i>consilium</i> for dropsy (<i>hydrops</i>)	unknown	Marcus Christophorus a Werhart	01/07/1560	MsS204b 261v
A <i>consilium</i> for dropsy (<i>hydrops</i>)	Trincavellus X	unknown		MsS204b 267r-269v
A consultation for <i>splenis inflatio</i> (fragment)	Nicolaus Zerchinta	Conrad Gessner		MsS204b 286r
A consultation for <i>melancholia hypochondriaca</i>	Venerand Gabler	Conrad Gessner		MsS204b 288r-89v
A consultation for <i>melancholia hypochondriaca</i> (fragment)	Venerand Gabler	Conrad Gessner		MsS204b 292r

Letter	Sender	Addressee	Date of sending	Shelves Pages
A consultation for kidney stones (<i>calculus</i>)	unknown	Conrad Gessner		MsS204c 14r
A consultation for kidney stones (<i>calculus</i>)	unknown	Conrad Gessner		MsS204c 14v
A <i>consilium</i> for kidney stone (<i>calculus</i>) (fragment)	Felix Platter	Conrad Gessner		MsS204c 23r-v
A <i>consilium</i> for kidney stone (<i>calculus</i>) (fragment)	Conrad Gessner	unknown		MsS204c 38v
A <i>consilium</i> for kidney stone (<i>calculus</i>)	Pieter van Coudenberghe	Conrad Gessner		MsS204c 39v
A <i>consilium</i> for <i>stranguria</i>	Conrad Gessner	Leonhardus Carolus		MsS204c 66r-v
A consultation for <i>urinae ardor</i> (fragment)	Adolfus Moetellus	Conrad Gessner		MsS204c 70v
A <i>consilium</i> for <i>urinae ardor</i>	Conrad Gessner	Munzmeister		MsS204c 71r
A consultation for <i>urinae ardor</i>	Christophorus Kotaberus	Conrad Gessner	23 May	MsS204c 74r
A consultation for diabete	Fridolin Brunner [Fontinus]	Conrad Gessner	4 November	MsS204c 78r
A consultation on a sexual problem	Etschenreutter	Conrad Gessner		MsS204c 92
A consultation for <i>uteri suffocatio</i> (fragment)	Caspar Wolf	Conrad Gessner		MsS204c 179r
A consultation for an abortion	Caspar Wolf	Conrad Gessner		MsS204c 206v

Section 2: Formalising *consilia* and consultations

A comparison can be drawn between Gessner's bilingual *consilium* on Epilepsy, and Gessner's exchange with Conrad Forer about the epileptic butcher. While the authority of the first one certainly resided partly in its division into several sections, the letters exchanged with Forer appear much less formal.

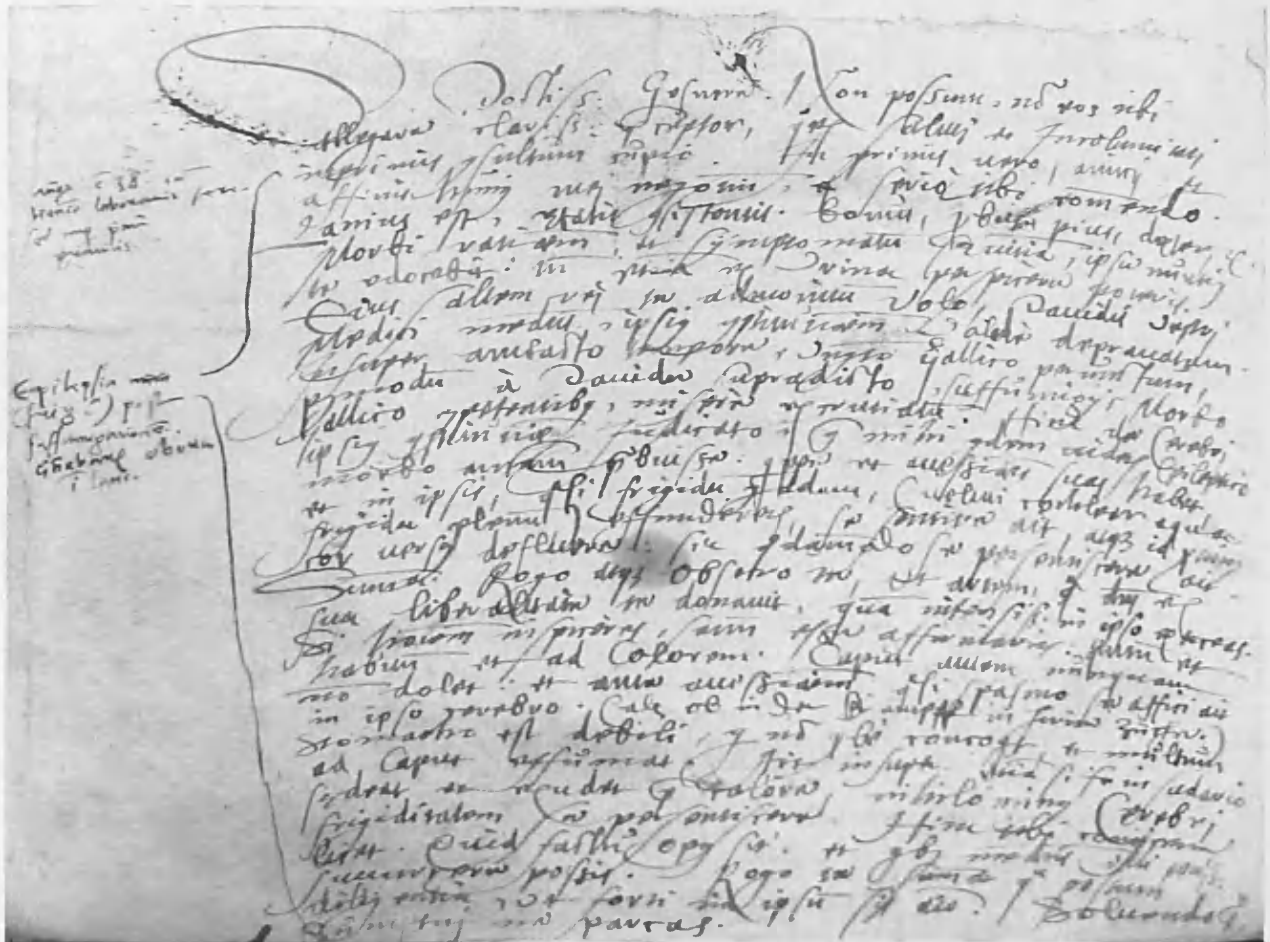


Figure 24: Forer to Gessner, MsS204a135v

Section 3: The Words of the patient

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Etschenreutter

Anno praeterito clausi D. D. Conrade a. h. literas beneuolentia restituit
 9 octobris accipi, ad quas praeteritum respondi, nisi id videretur in mora
 fuisse, quod etiam hominibus praeteritum de variis causa satis
 fuerit liberum non erat. Hanc accipias causam velum, cum semper
 animo veluerem quoniam modo tua officia quasi arduis rebus
 nihil plane certi de variis administratione occurreret, quod tibi scire
 foret, quia Doctori inueni Georgio Hambergero Cuius temporis Tu-
 bingen moranti, iam vno practicum ordinatum Rekenburgi ad
 Tubingen agniti) inueni ac prius velum annis condiscipulo
 solum Cursum annuam quem ego ab ore Fallopy ex ipso annis
 1560 in 1561. omnium viderem etiam gathi scabiei tractatu
 mea sententia longe utilissimum, hinc Tubingen misissem, exemplum
 aliud nullum ad manus, ex quo vel portio ipsam, vel indicamentum
 petere liceret. Sed iam ad praeteritum (nam 22 Maij alius i. lo
 scabiei literas) ordine respondebo. Morbus qui affligit illum de
 quo etiam scripsi cupis (ex aduocato) perissima coqueles) fuit
 momentaneus, hoc est qui in momento, vero vni fuit quo scabiei,
 quasi incipiens, augescens, caudoliter ad statum affligit. Anno clauso
 4 Iulij cum quiesca surgeret (in nesci) (scabiei) (scabiei) ab excoqueles
 morbo confecto exoneraret, tunc de aperiens ipsius, et vix sordidus
 Stephanus aduocatus subieceret, quid sit in momento temporis
 cum offi tractatum morbo daret (Ea que ad lo scabiei placide
 fuit auxilium offensa legio, praeteritum suo q. ab ipso ob vixmudiam
 refectis tractare quod in accipit de oculis offequeles noluit, pauci
 quod praeteritum restituit, et ut vni fuit in pauci videretur)
 quid est factum statim excoqueles) cepit morbo daret in
 tantum ut 6 Iulij (ego vidi) exudaui, nulloq. fomento ex
 vno, vel calido oleo morbo daret reduci potuit, cum antea
 ophtime mēdaly iniecerit. Hovet illa tibi scabiei,
 nisi amoris affluat quo lo amplius, vixmudiam xopagula
 effugit. At in tantum inuenit malum, ut 5 Iulij duplo
 supposito maior esset morbo daret, 6 Iulij triplo. Dolore
 erat intensissimus, hinc de ruptura ipsius affectionis nec non
 gangrana, ob iniectionem praeteritum abovae) iniectionem
 Is affertur non autem ex dicit quidam voluit ex toto. Ad
 suppositum usq. dolore diabolici continui q. etiam cum materia
 inuolui, exierit non parua copia a morbo) non multum vixmudiam
 aperiens, quod vixmudiam temporis oia restituit, ut plur in de
 iam comedi quam in comedi habet. Sed quibus affertur xamo
 diis illud malum, scire cupis etiam praeteritum literas, cum scabiei,
 alia xopato ab lo aliat. Remedia vixmudiam multa tibi vixmudiam
 praeteritum, non in hoc tantum sed alijs casibz, praeteritum id tam praeteritum

D. C. Hamberg
Rekenburg
Tubingen

datus sine vno no
māp indante praeteritum
scabiei

Cursus leg. de
scabiei
Iulij et maij

Cursus

Figure 27: Etschenreutter to Gessner, MsS204a92r

Section 4: From the Particulars to the General:

Gessner's work on Paralysis

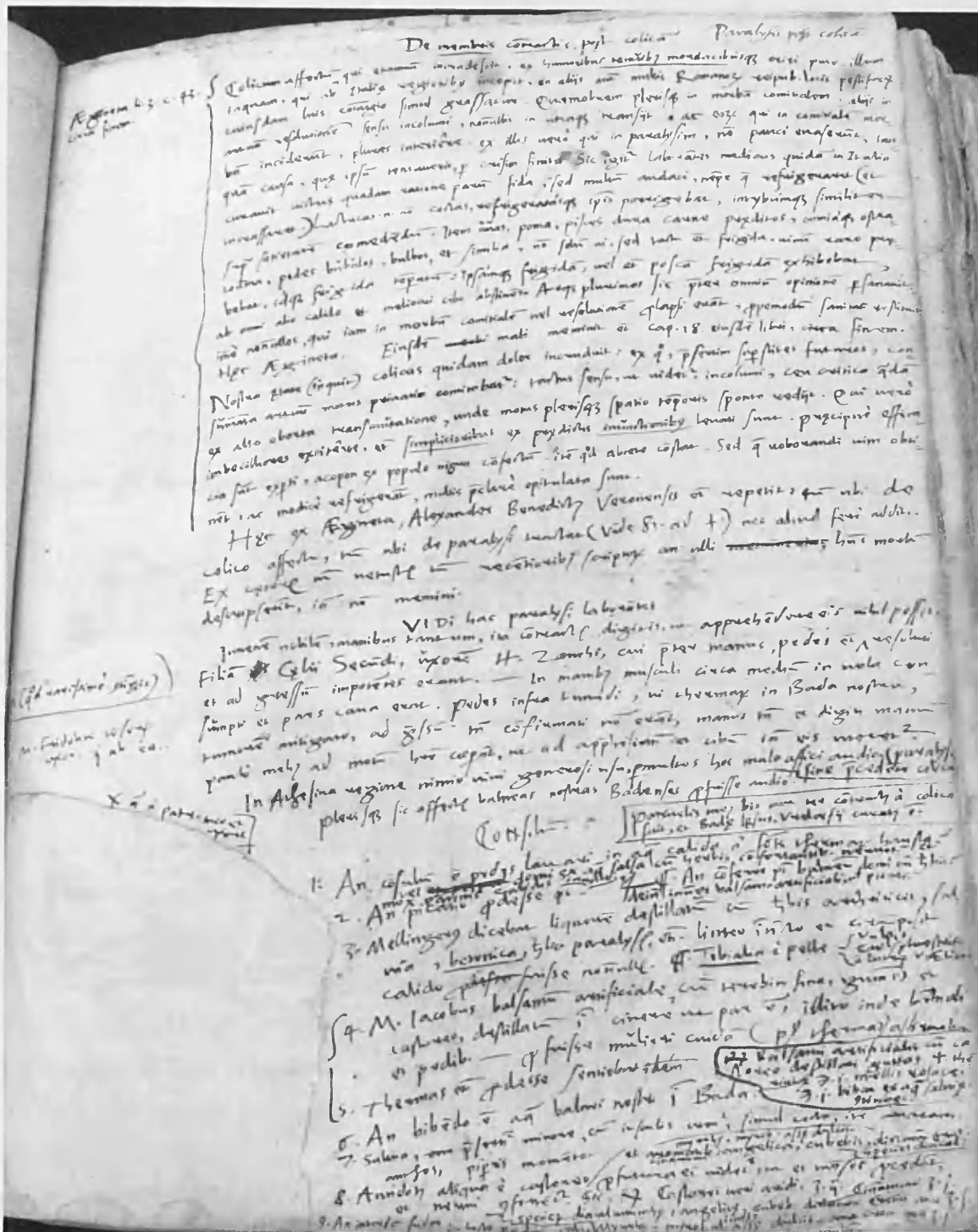


Figure 29: ZBZ MsS204a 109r. Constructing general knowledge out of particulars.

Gessner first quoted Aeginetus, then listed the cases of paralysis he had seen (VIDI) and finally proposed a tentative *consilium*, i.e. a set of prescriptions for the condition.

Section 5: Two rows of eyelashes?

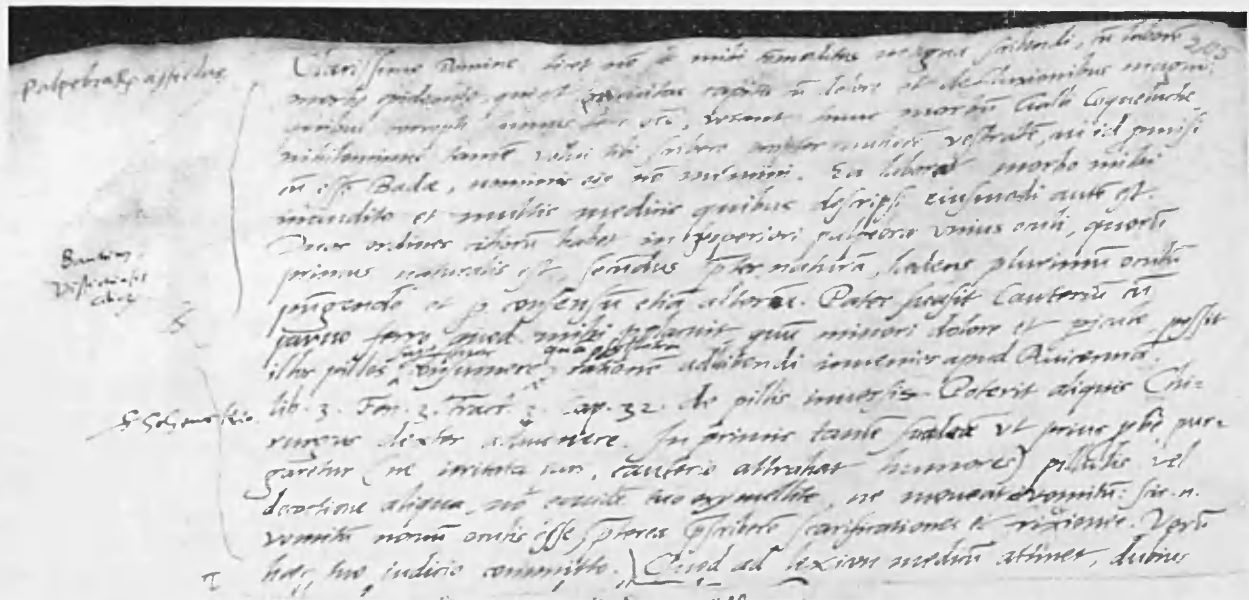


Figure 30: Fragment of a letter from Jean Bauhin the Younger, ZBZ MsS204a205r

Transcript of the letter

“Clarissime Domine licet non mihi formalitas magna scribendi, cum laborem morbo epidemico, qui est gravitas capitis cum dolore et defluxionibus magnis, quibus correpti sumus fere omnes, (vocant hunc morbum Galli Coqueluche) nihilominus tamen volui tibi scribere propter mulierem vestratem, cui id promisi cum essem Badae, nominis ejus non memini. Ea laborat morbo mihi inaudito et multis medicis quibus descripsi ejusmodi autem est. Duos ordines ciliorum habet in superiori palpebra unius oculi, quorum primus naturalis est, secundus praeter naturam, laedens plurimum oculum pungendo et per consensum etiam alterum. Pater suasit cauterium cum parvo ferro quod mihi perplacuit, quum minori dolore et periculo, possit illos pillos superfluos consumere, quam psylotra: rationem adhibendi invenies apud Avicennam lib.3. Fen 3. Tractatum 3 Cap. 32 de pillis inversis. Poterit aliquis Chirurgus dexter admove. In primis tandem suaderem ut prius probe purgaretur (ne irritata pars cauterio attrahat humores) pillulis vel decoctione aliqua, non equidem tuo oxymelite, ne moveat vomitum: scis enim vomitum nocivum oculis esse, praeterea praescriberem scarificationes et frictiones. Verum haec tuo iudicio committo...”

The letter was transcribed, with some modifications, in *Epistolae*, 1591, p. 115-116.

Section 6: From Cases to News

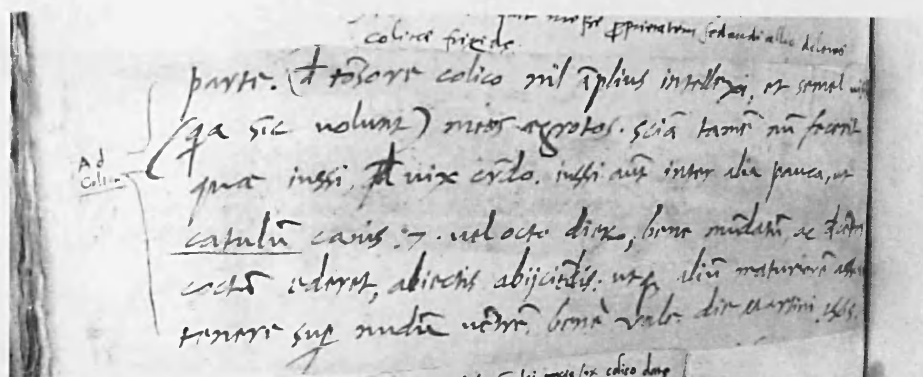


Figure 31: Eight days with a dog on the Belly: MsS204b 148v

APPENDIX V: THE THESAURUS MEDICINAE

PRACTICAE

The *Thesaurus Medicinae Practicae* is kept in Zurich Zentralbibliothek, at the shelfmark [MsS204a-c]. This extraordinary manuscript offers crucial information on Gessner's medical practice and medical sources, on humanist practices of excerpting, cutting and pasting, and on the way knowledge could be transmitted from master to disciples. It has, however, remained totally neglected by historians, who saw in it a collection of recipes and case notes.

The *Thesaurus* was constituted around 1592 by Caspar Wolf, heir of Gessner's medical papers. However, there is evidence, as we shall see, that Wolf worked on and sometimes simply reused material organised earlier by Gessner himself.

The *Thesaurus* includes at least 142 letters and fragments of letters, that were cut and pasted under the various chapter headings of a manuscript organised, according to the rule of the medical *Practica*, from head to toe (or rather, in our case, from head to waist).

The first Volume (MsS204a) focuses on the diseases of the head, the second (MsS204b) examines the diseases of the chest and of the abdomen and the third (MsS204c) the diseases of the kidney, the gall bladder, and the sex.

Examine is perhaps the wrong word. There is no detailed, theoretical examination of the causes of the disease in general. Usually, the various headings list first the practical cases met by Gessner or his correspondents during his practice, and then the remedies sent by correspondents, found in books or collected from empiricists and other practitioners. Thus, the *Thesaurus* offers us insights both for a reappraisal of Gessner's medical practice (reconstituting his clientele, for instance, with the help of the numerous case notes) and for an inquiry into sixteenth-century therapeutics (Gessner's colour paintings of a bandage for a hernia, with detailed how-to-do-it instructions, for instance, would deserve inquiry).

This appendix thus presents a glimpse of the *Thesaurus*. I have given here many pictures because I believe that, in the case of cut-and-paste material, a form of direct access to the materiality of the object must be preserved.

Section 1: The constitution of the *Thesaurus Medicinae Practicae*.

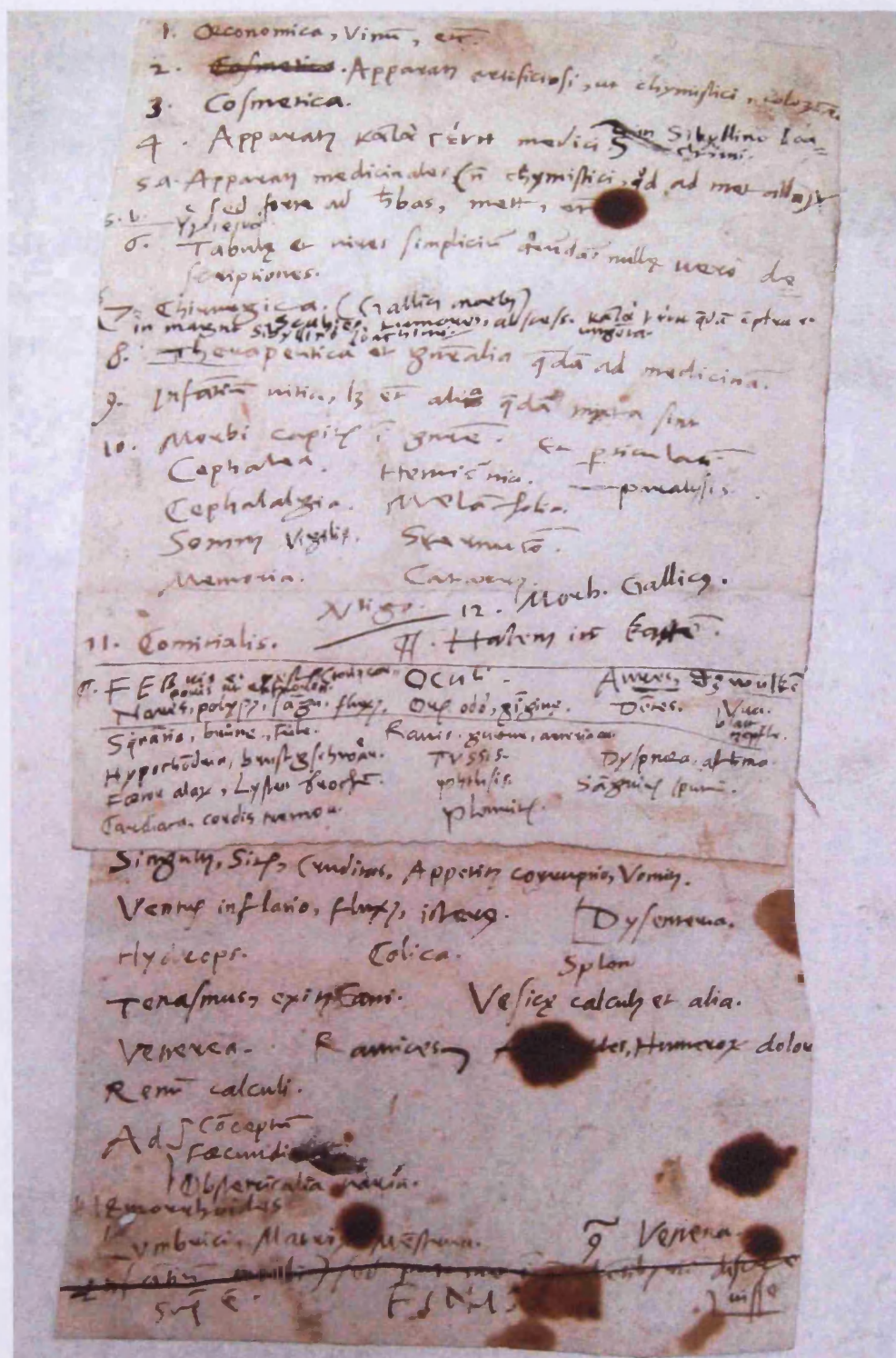


Figure 32: Draft of a list of contents, drawn by Gessner

Section 2: Contents of the *Thesaurus Medicinae Practicae*:

According to Wolf

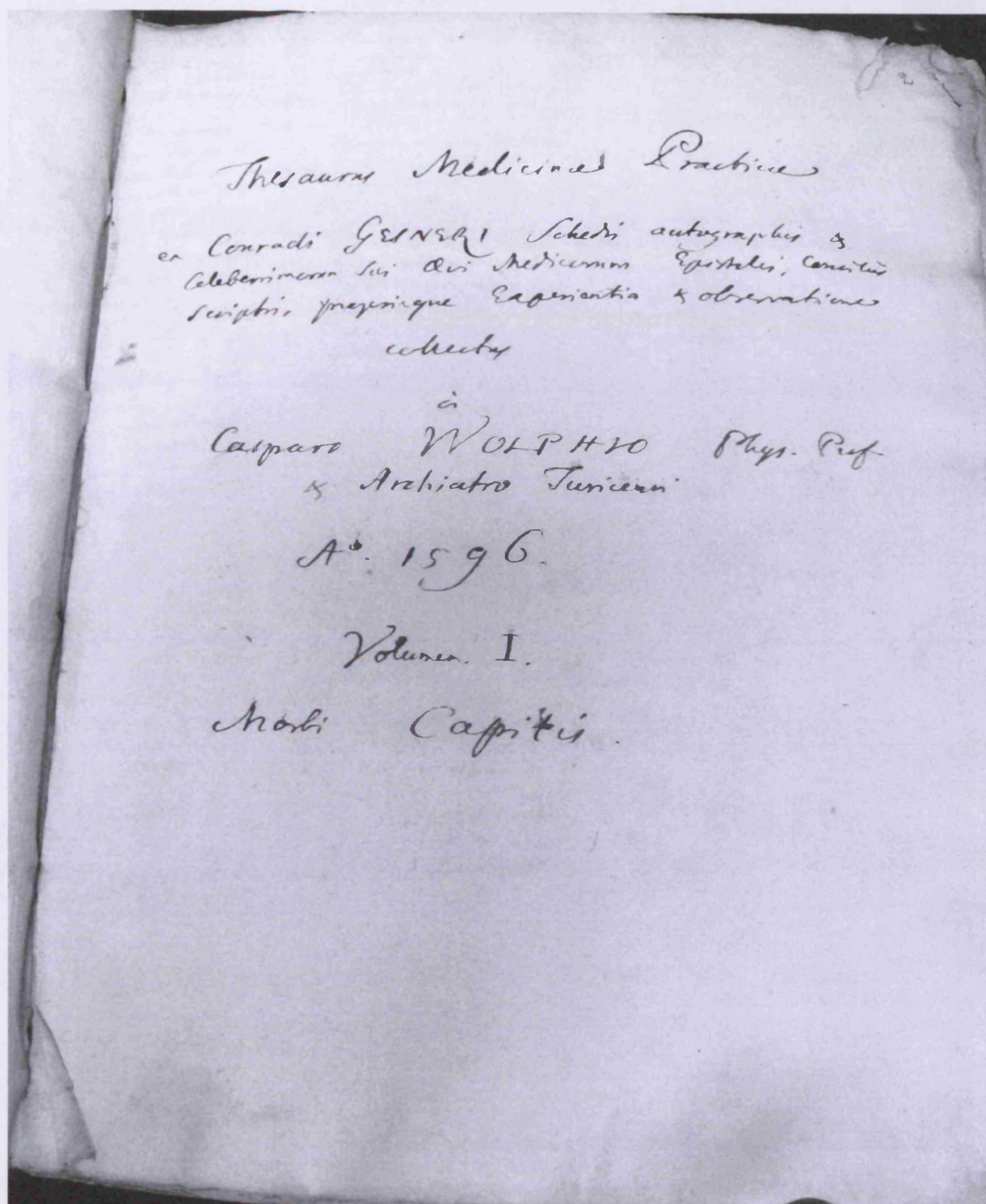


Figure 33: Title page of MsS204a

Table of contents by Wolf for all three volumes.

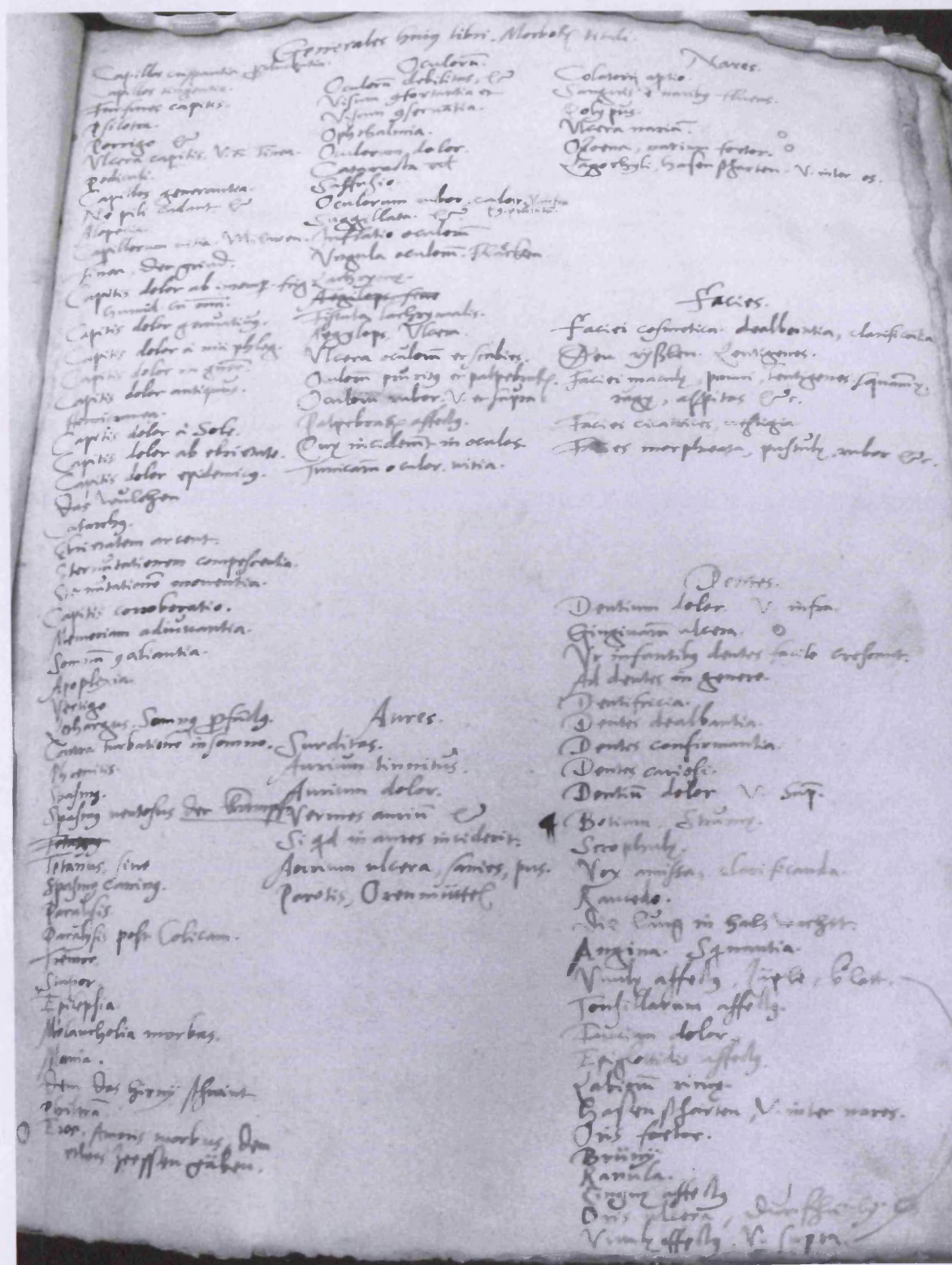


Figure 34: Table of contents of MsS204a, redacted by Wolf (ZBZ MsS204a 3r)

<p> <i>Chelone</i> <i>Reana</i> <i>Veneria</i> <i>enhemonchagia</i> <i>canicula</i> <i>lilium</i> </p> <p> <i>Urina</i> <i>Relentio</i> <i>Dysuria</i> <i>noctis ementur</i> <i>Strangaria</i> <i>Ordis</i> <i>incombinatio</i> <i>Diachetes</i> </p> <p> <i>Testes</i> <i>primitus</i> <i>inflammatio</i> <i>apertura</i> <i>Tumor</i> </p> <p> <i>Virgo</i> <i>Tumor</i> <i>inflammatio</i> <i>Duritia</i> <i>Ulcerum</i> </p> <p> <i>Gonorrhoea</i> <i>caner</i> <i>Venerum</i> <i>inflammatio</i> <i>adu. Testis</i> <i>Hernia</i> <i>Lib. arbor. Placuer</i> <i>—</i> <i>scroph. Arbor. Placuer</i> <i>—</i> <i>v. Schuch. B. G. Holo. Pl.</i> </p> <p> <i>—</i> <i>Intestinalis</i> <i>—</i> <i>carum & varicosa</i> <i>—</i> <i>ventosa</i> <i>—</i> <i>aquosa</i> </p> <p> <i>Umbilici</i> <i>eminentia</i> </p> <p> <i>De Matrice generalis Physica, melior</i> <i>Matr. Virgine</i> <i>ad videri instigando</i> <i>ad videri instigando</i> <i>—</i> <i>abundantia</i> <i>Matr. alb. Matris humiditas</i> <i>Matris dolor</i> <i>uteri suffocatio</i> <i>—</i> <i>pusulatus</i> <i>—</i> <i>apertura</i> <i>—</i> <i>ulera</i> <i>—</i> <i>sanit. — rhagades</i> <i>Conceptum iuuantia e. e.</i> <i>Matr.</i> <i>Pregnatio morbi</i> <i>—</i> <i>dieta</i> <i>obstructio</i> <i>et labor praeventio</i> </p>	<p> <i>Dolor post partum</i> <i>accidentia post partum</i> <i>Postum praeventio</i> <i>Factum morbum eductio</i> <i>Secundina praeventio</i> </p> <p> <i>Mammam affectus</i> <i>—</i> <i>inflammatio</i> <i>—</i> <i>Tumor & apertura</i> <i>—</i> <i>dolor</i> <i>—</i> <i>inflammatio — Scroph.</i> </p> <p> <i>Papillam rima</i> <i>Lactis grani in manib.</i> <i>Loc. multiplicatio</i> </p>
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Figure 36: Table of contents MsS204c (ZBZ MsS204c 3r)

APPENDIX VI: A NEW EDITORIAL GENRE:

SIXTEENTH-CENTURY *EPISTOLAE MEDICINALES*

Section 1: An editorial genre: the *Epistolae Medicinales* in the sixteenth century

The Medical Letters genre met with important changes between its birth in 1521, with Giovanni Manardi's first publication of *Epistolae Medicinales*, and the seventeenth-century. After a long period, during which the same five authors were constantly reedited, Mattioli's publication of Medical Letters in 1561 and 1564, and then Gessner's *Epistolarum Medicinalium libri III*, seem to have initiated a renewal of the genre, one that was less based on reedition than on the continual appearance of new authors or new letters. Mostly resting on the memorial value of the publications, these new publications were definitively on the side of *practica*. They were, after 1580, rarely published alone, but were joined with other genres, especially with *consilia* or consultations. The epistolary form remained a formal device for the presentation of medical knowledge. However, the presentation together with *consilia* suggests either a balance between the practical part of medicine (represented by the *consilium*, which adapts the theory to the individual case) and its more theoretical part (expounded in the letter), or a parallelism in the two genres.

The success of the new genre is well attested. *Medical letters* represented a substantial proportion of medical publications: for instance, in his study of medical publications, Ian MacLean counts in the Catalogues of the Frankfurt Fairs, 33 new medical publications for the period between 1580 and 1589, and 36 for the decade between 1590 and 1599. For the same periods, respectively 7 and 17 books of Medical letters were published: it seems that the genre really attracted a large readership. (Ian MacLean, *Logic, Signs and Nature in the Renaissance. The Case of Learned Medicine*, Cambridge, Cambridge University Press, Chapter 2: The Transmission of Medical knowledge, 36-67.)

The following data are meant to give elements of reflexion on the new genre, and do not pretend to exhaustiveness.

Section 2: A list of sixteenth-century publications of Medical Letters

These are preliminary results of an inquiry into the publication of medical letters in Latin. They only include books bearing a direct relationship in their title with *Epistolae medicales*. They have been obtained by consulting the catalogues of different libraries (British Library, Wellcome Library, Glasgow University Library and Edinburgh University Library, Libraries at Oxford and Cambridge, Bibliothèque Nationale de France, Bibliothèque Sainte Geneviève, Bibliothèque de Montpellier, BIUM Paris) as well as of online catalogues, such as EDIT 16.

I have concentrated on sixteenth-century publications, between 1521 (date of the first publication) and 1600. However, I have indicated later reprints or publications of authors first printed before 1600.

This list is close to that given by Ian Maclean in “The Medical Republic of Letters before the Thirty Years War”, 2008, p. 29. For the sake of our argument, I have mentioned the publications in chronological order, and included some titles Maclean does not indicate.

1. Giovanni Manardi, *Epistolae medicales in quibus multa recentiorum errata et antiquorum decreta reserantur*. Ferrara: B. de Odonio, 1521.
2. Giovanni Manardi, *Medicinales epistolae: Recentiorum errata, & antiquorum decreta penitissime reserantes: Epistola Huberti Barlandi ad medicinae apud Lovanienses studiosam iuventutem...* Strasburg: Johannes Schott, 1529.
3. Giovanni Manardi, *Epistolarum medicinalium libri duodeuiginti: Hi partim infinitis in locis & ab ipso autore iam recens castigati sunt, partim iam primum in lucem aeduntur. Eiusdem annotationes & censura in medicamina simplicia & composita Mesue*, Basle: [Johann Bebel], 1535.
4. Luigi Mundella [Mondella], *Epistolae medicales nunc ab ipso autore auctae et recognitae: in quibus variae et difficiles quaestiones utiliter tractantur; Galeni atque aliorum medicorum loci*

obscuri et implicati illustrantur et explicantur: quae quidem omnia omnibus verae et incorruptae medicinae studiosis tum utilissima, tum necessaria sunt. Basle: Michael Ising[rin], 1538.

5. Giovanni Manardi, *Epistolarum medicinaliu[m] libros XX: è quibus ultimo duo in hac editione primu[m] accesserunt, unà cum epistola, iandudum desiderata, de morbis interioribus, quam utinam immatura morte non praeuentus, totam absolvere potuisset. Eiusdem in Ioan. Mesue de simplicia & composita annotationes & censur[a]e...* Basle: Michael Isengrin, 1540.
6. Luigi Mundella [Mondella], *Epistolae medicales nunc ab ipso autore auctae et recognitae: in quibus variae et difficiles quaestiones utiliter tractantur; Galeni atque aliorum medicorum loci obscuri et implicati illustrantur et explicantur...* Basle: Michael. Ising[rinius], 1538.
7. Giovanni Manardi, *Epistolarum medicinalium lib. XX. Ejusdem in Ioan. Mesue simplicia et composita annotationes et censurae ... Omnia post caeteras omnes impressiones nunc primum emendatiora in lucem exeunt.* Venice: Petrus Schoeffer, 1542.
8. Luigi Mundella, *Epistolae medicales, variarum quaestionum, & locorum insuper Galeni difficilium expositionem continentes, omnibus qui veram artem exercere volunt apprime utiles. Ejusdem annotationes in Antonii Musae Brasavole Simplicium medicamentorum examen.* Basle: Michael Isengrin, 1543.
9. Giovanni Manardi, *Epistolarum medicinalium libri XX. Ejusdem in Ioan. Mesue simplicia et composita annotationes et censurae ...* Lyons: Godefridus et Marcellus Beringorus Brothers, 1549.
10. Giovanni Manardi, *Epistolarum medicinalium libri uiginti: denuò nunc ad autographum haud sine fructu collati, & editi. Eiusdem in Ioan. Mesue Simplicia & composita annotationes & censurae, ...* Basle: Michael Isengrin, 1549.
11. Niccolò Massa, *Epistolae medicales, et philosophicae, elegantissimae ad omnes fere morbos nuperrime editae.* Venice: F. Bindoni & M. Pasini, 1550.
12. Luigi Mundella, *Epistolae medicales ... ab ipso autore auctae et recognitae: ... in quibus ... Galeni, at[que]; aliorum medicorum loci obscuri ... illustrantur ... Ejusdem annotationes in A. Musae Brasavole simplicium Medicamentorum Examen.* Basle: [Michael Isengrin], 1550.

13. Joannes Baptista Theodosius, *Medicinales epistolae LXVIII: In quibus complures uariae[ue] res ad medicinam, physicenq[ue] spectantes disertissimè tradu[n]tur, quibusuis literarum studiosis utiles, nunc primum in lucem emissæ*. Basle: Nicolaus Episcopus Iunior, 1554.
14. Johannes Lange, *Medicinalium epistolarum miscellanea* Basle: Johannes Oporinus, 1554.
15. Taddeo Duno, *Epistolarum Medicinalium libri...* Zurich, Gessner Brothers, 1555.
16. Philippus Tingus, *Epistolæ Medicinales diversorum authorum, nempe, J. Manardi ... N. Massae ... A. Mundellae ... J. B. Theodosii ... J. Langii, etc.* Lyons, Heirs of Jacob Junta, 1556.

(Including: Johannes Lange, "Epistolae medicinales diversorum authorum" ; Giovanni Manardi, "Epistolarum medicinalium," Niccolò Massa, "N. Massæ epistolæ medicinales et philosophica, etc"; Luigi Mondella, "Epistolarum medicinalium liber" ; Joannes Baptista Theodosius, "Medicinales Epistolae LXVIII...")

17. Philippus Tingus, *Epistolæ Medicinales diversorum authorum, nempe, J. Manardi ... N. Massae ... A. Mundellae ... J. B. Theodosii ... J. Langii, etc.* Lyons, heirs of Jacob Junta, 1557.

(Including Johannes Lange, "Epistolae medicinales diversorum authorum" ; Giovanni Manardi, "Epistolarum medicinalium" ; Niccolò Massa, "N. Massæ epistolæ medicinales et philosophica, etc" ; Luigi Mondella, "Epistolarum medicinalium liber" and Joannes Baptista Theodosius, "Medicinales Epistolae LXVIII.")

18. Giovanni Manardi, *Epistolarum medicinalium libri XX*. Venice, Johannes Gryphius and Giovanni Francesco Camocio, 1557.
19. Niccolò Massa, *Epistolarum medicinalium pars secunda*. Venice, Gryphius, 1558.
20. Niccolò Massa, *Epistolarum medicinalium tomus alter: in quo tractantur ea, quae tum ad theoriam, tum ad praxin medicam pertinere uidentur, & quæstiones etiam continentur de animorum immortalitate*. Venice: Giordano Zilletti; 1558.
21. LANGE, Johann. *Secunda epistolarum medicinalium miscellanea*. Basle: Bryngellus et Oporinus, 1560.

22. Pietro Andrea Mattioli, *Epistolarum medicinalium libri quinque*. Prague: Georgius Melantrichius ab Aventino and Vincenzo Valgrisi, 1561.
23. Pietro Andrea Mattioli, *Epistolarum medicinalium libri quinque*. Lyons: Caesar Farina, 1564.
24. Conrad Gessner, *Epistolarum medicinalium libri III: His accesserunt eiusdem Aconiti primi Dioscoridis asseneratio, & De oxymelitis elleborati vtriusq[ue] descriptione & usu libellus*. Zurich : Christoph Froschauer, 1577.
25. Orazio Augenio, *Epistolarum medicinalium libri XII. Omnibus non medicis modo, sed etiam bonarum literarum studiosis, admodum utiles*. Turin : Heirs of Nicola Bevilaqua, 1579.
26. Conrad Gessner, *Epistolarum medicinalium ... liber quartus*. Wittenberg : Simon Gronenberg, 1584.
27. Thomas Moffett, *De jure et praestantia chymicorum medicamentorum dialogus apologeticus ... Accesserunt etiam epistolae quaedam medicinales ad medicos aliquot conscriptae*. Frankfurt-am-Main: heirs of Andreas Wechel, 1584.
28. Antonius Álvarez, *Epistolarum, & consiliorum medicinalium pars prima, etc*. Naples: Apud Ippolito Salviani, 1585.
29. Vettore Trincavello, *Consiliorum medicinalium libri III. Epistolarum medicinalium libri III. Nunc primum editi. Duae quaestiones, altera de reactione iuxta doctrinam Arist. et Aver., altera de vena secunda in pleuritide, et aliis internorum viscerum inflammationibus. Alias impressae*. Venice: Camillum Borgominerium, 1586.
30. Vettore Trincavello, *Consiliorum medicinalium libri III. Epistolarum medicinalium libri III. Nunc primum editi. Duae quaestiones, altera de reactione iuxta doctrinam Arist. et Aver., altera de vena secunda in pleuritide, et aliis internorum viscerum inflammationibus. Alias impressae*, Basle, Konrad Waldkirch, 1587.
31. Carolus Crassus and Giovanni Manardi, *Caroli Crassi ... Annotationes in Ioan. Mesuem de simplicibus. Eiusdem annotationes in epist. Ioan Manardi Ferrariensis. Eiusdem tabula de signis conceptus. Eiusdem tabula de fluxu sanguinis. Eiusdem fragmentum de modo collegiandi*. Venice: Domenico and Giovanni Batista Guerra, 1588.

32. Johannes Lange, *Epistolarum medicinalium volumen tripartitum denuo recognitum et dimidia sua parte auctum*. (Preface by Nicolaus Reusner, edited by Georg Wirth). Frankfurt-am-Main, Heirs of Andreas Wechel, Claudius Marnius and Johannes Aubrius, 1589.
33. Balduinus Ronsse [Ronsseus], *Miscellanea seu epistolae medicales*. Leiden: Plantin and , Franciscus Raphelengius, 1590.
34. Constanzo Varoli, *Anatomiae sive de resolutione corporis humani... libri IIII. Ejusdem Varolii et Hier. Mercurialis de Nervis opticis nonnullisque aliis preter communem opinionem in humano capite observatis epistolae...* Frankfurt-am-Main: Johannes Wechel and P. Fischer, 1591.
35. Johannes Crato von Crafftheim, *Consiliorum et epistolarum medicinalium liber primus*. Edited by Lorenz Scholtze. Frankfurt-am-Main: [Heirs of A. Wechel, C. Marnius & J. Aubrius], 1591.
36. Conrad Gessner, *De plantis a divinis sanctisque nomen habentibus... Additae sunt Conradi Gesneri medici Clariss. Epistolae hactenus non editae*. Basle: Konrad Waldkirch, 1591.
37. Orazio Augenio, *Epistolarum et consultationum medicinalium. Prioris tomi libri XII*. Venice: Damianus Zenarius, 1592.
38. Johannes Crato von Crafftheim, *Consiliorum, et epistolarum medicinalium... liber secundus*. Edited by Lorenz Scholtze. Frankfurt-am-Main: Heirs of A. Wechel, C. Marnius & J. Aubrius, 1592.
39. Johannes Crato von Crafftheim, *Consiliorum, et epistolarum medicinalium... liber tertius*. Edited by Lorenz Scholtze. Frankfurt-am-Main: Heirs of A. Wechel, C. Marnius & J. Aubrius, 1592.
40. Taddeo Duno, *Epistolae medicales locis multis auctae: in quibus de oxymelitis facultatibus, & curatione pleuritidis, morborumque articularium tractatur. Eiusdem De hemitritaeo, sive de febre semitertiana libellus. Item, Miscellaneorum de re medica liber omnino utilis, alias non editus*. Zurich: Johannes Wolf, 1592.
41. Johannes Crato von Crafftheim, *Consiliorum, et epistolarum medicinalium... liber quartus*. Edited by Lorenz Scholze. Frankfurt-am-Main: Heirs of A. Wechel, C. Marnius & J. Aubrius, 1593.

42. Johannes Crato von Crafftheim, *Consiliorum & epistolarum medicinalium liber quintus*.
Edited by Lorenz Scholze. Frankfurt-am-Main: Heirs of A. Wechel, C. Marnius & J. Aubrius, 1594.
43. Johannes Crato von Crafftheim, *Consiliorum et epistolarum medicinalium ... liber primus*.
Edited by Lorenz Scholze. Frankfurt-am-Main: [Heirs of A. Wechel, C. Marnius & J. Aubrius], 1595.
44. Thomas Erastus, *Disputationum & epistolarum medicinalium volumen...* Edited by
Theophilus Maderus. Zurich, Johannes Wolf (Typis Froschoveri), 1595.
45. Jakob Horst, *Epistolae philosophicae et medicinales: cum vita Gregorij Horstij consulis
Reipublicae Torgensis, viri prudentia, doctrina & facundia ornatissimi a R. Reineccio. Addita sunt
consolatoria J. Caselii et N. Chytræi ad J. Horstium fratrem, item aliorum carmina funebria, etc.*
Edited by Reiner Reineccio, [Leipzig?]: Valentinus Voegelinus, 1596.
46. Joannes Donatus Santorus, *Epistolarum medicinalium libri septem*. Naples: Typographia
Steldiolana, 1597.
47. Orazio Augenio, *Epistolarum & consultationum medicinalium libri XXIII: in duos tomos
distributi. Opus quidem ob doctrinae varietatem, difficultium morborum curationem, & maximarum
difficultatum dilucidationem, non modo medicis ac philosophis, sed etiam omnibus bonarum artium
studiosis apprime necessarium ... Quibus accessere ejusdem authoris, De hominis partu, libri II.
Nunc primum in Germania ab innumeris mendis repurgati, ac in lucem emissi*. Frankfurt-am-
Main: Heirs of A. Wechel, C. Marnius & J. Aubrius, 1597.
48. Lorenz Scholze, *Epistolarum philosophicarum: medicinalium, ac chymicarum a summis nostrae
aetatis philosophis ac medicis exaratarum, volumen: opus, cum ob remediorum saluberrimorum
copiam; tum ob variam doctrinam, ac varij generis difficultium & obscurarum quaestionum
explicationem, non solum medicis; verumetiam philosophis admodum utile, ac necessarium. Addito
elencho rerum omnium notatu dignissimarum refertissimo*. Edited by Lorenz Scholze.
Frankfurt-am-Main: Heirs of A. Wechel, C. Marnius & J. Aubrius, 1598.
49. Pietro Andrea Mattioli, *Opera quae extant omnia...* Frankfurt-am-Main: Nicolaus
Bassaeus, 1598.
50. Orazio Augenio, *Epistolarum medicinalium tomi tertii libri duodecim: In quibus non solum
maximae difficultates ad medicinam & philosophiam pertinentes dilucidantur: sed etiam Alexandri*

- Massariae Vicentini Additamentum apologeticum, & disputationes secundum Hippocratis & Galeni doctrinam funditus euertuntur.* Frankfurt-am-Main: Heirs of A. Wechel, C. Marnius & J. Aubrius, 1600.
51. Orazio Augenio, *Epistolarum et consultationum medicinalium prioris tomi libri XII [-alterii tomi libri XII]*. Venice: Damianus Zenarius, 1602.
 52. Johannes Crato von Crafftheim, *Consiliorum et epistolarum medicinalium. Io. Cratonis a Kraftheim, archiatri Cæsarei. Liber primus* Edited by Lorenz Scholze. Frankfurt-am-Main: Johannes Pressius and Theodoricus Wesselius, 1603.
 53. Johannes Lange, *Epistolarum medicinalium volumen tripartitum: denuo recognitum, & dimidia sui parte auctum.* Hanau: Hanau: Wechel for Claudius Marnius and the heirs of Johannes Aubrius, 1605.
 54. Orazio Augenio, *Epistolarum medicinalium tomi tertii libri duodecim: In quibus non solum maximæ difficultates ad medicinam & philosophiam pertinentes dilucidantur; sed etiam Alexandri Massariae Vicentini Additamentum apologeticum, & disputationem secundum Hippocratis & Galeni doctrinam funditus euertuntur. Nunc primum Venetiis in lucem editi.* Venice: heirs of Damianus Zenarius, 1607.
 55. Johannes Crato von Krafftheim, *Consiliorum et epistolarum medicinalium Job. Cratonis a Kraftheim ... et aliorum praestantissimorum medicorum, liber secundus; nunc primum studio & opera.* Edited by Lorenz Scholze. Hanau : Hanau: Wechel for Claudius Marnius and the heirs of Johannes Aubrius, 1609.
 56. Lorenz Scholze, *Epistolarum philosophicarum: medicinalium ac chymicarum a summis nostrae aetatis philosophis ac medicis exaratarum volumen... Addito elencho rerum omnium.* Hanau: Wechel for heirs of Johannes Aubrius, 1610.
 57. Johannes Crato von Crafftheim, *Consiliorum et epistolarum medicinalium liber septimus.* Edited by Lorenz Scholze. Hanau: Wechel for Heirs of Johannes Aubrius, 1611.
 58. Johannes Crato von Crafftheim, *Consiliorum et epistolarum medicinalium ... liber sextus.* Edited by Lorenz Scholze. Hanau: Wechel for heirs of Johannes Aubrius, 1611.

59. Johannes Crato von Crafftheim, *Consiliorum & epistolarum medicinalium, liber primus*[-*septimus*]. Edited by Lorenz Scholze. Frankfurt-am-Main, Daniel and David Aubrius and Clemens Schleichius, 1611.

60. Giovanni Manardi, *[Iatrologia epistolike]; siue, Curia medica Ioannis Iacobi Manardi: viginti libris epistolarum ac consultationum medicinalium adumbrata; nec non annotationibus & censuris ... in Ioannis Mesue simplicia & composita, adornata ... tertio iam reuisa* Hanau: Wechsel for heirs of Johannes Aubrius ,1611.

61. Thomas Moffett, *De Jure et Præstantia Chymicorum Medicamentorum dialogus apologeticus ... Accesserunt etiam Epistolæ quædam Medicinales ad Medicos aliquot conscriptæ*. In *Theatrum Chemicum...*, vol 1. Strasburg, Lazarus Zetzner, 1613.

62. Johannes Crato von Krafftheim, *Consiliorum et epistolarum medicinalium liber quartus, nunc secundo ... editus*. Edited by Lorenz Scholze. Hanau: Wechsel for Heirs of Johannes Aubrius 1614.

63. Balduinus Ronsse, *Opuscula medica: I. Epistolæ medicinales: II. De morbis muliebribus: III. De venatione medica: IV. De scorbuto: Accesserunt quidam aliorum celebrium medicorum de scorbuto tractatus*. Leiden: Iohannes Maire, 1618.

64. Johannes Crato von Krafftheim, *Consiliorum et epistolarum medicinalium liber quintus, nunc secundo ... editus*. Edited by Lorenz Scholze. Hanau: Wechsel for Daniel and David Aubris & Clemens Schleichius, 1619.

65. Johannes Crato von Crafftheim, *Consiliorum & epistolarum medicinalium liber primus*. Edited by Lorenz Scholze. Frankfurt-am-Main: Daniel and David Aubrius and Clemens Schleichius, 1620.

66. Johannes Crato von Krafftheim, *Consiliorum et epistolarum medicinalium liber tertius*. Edited by Lorenz Scholze. Hanau: Johannes Pressius, 1646.

67. Johannes Crato von Crafftheim, *Consiliorum & epistolarum medicinalium liber secundus*, Edited by Lorenz Scholze. Hanau: Caspar Rôteliuſ for Johannes Pressius, 1650.

68. Johannes Crato von Krafftheim, *Consiliorum et epistolarum medicinalium ... Liber primus* (-*septimus*). Edited by Lorenz Scholze. Frankfurt-am-Main, Johannes Pressius, 1654.

69. Johannes Crato von Crafftheim, *Consiliorum et epistolarum medicinalium liber quintus*
Frankfurt-am-Main and Hamburg: Johannes Wilhelmus Ammonius, 1655.

70. Thomas Moffett, *De Jure et Præstantia Chymicorum Medicamentorum dialogus apologeticus ...
Accesserunt etiam Epistolæ quædam Medicinales ad Medicos aliquot conscriptæ*, in *Theatrum
chemicum*, vol 1. Strasburg: Heirs of E. Zetzner, 1659.

71. Balduinus Ronsse, *Balduini Ronssei ... Epistolæ medicinales, in quibus plurima ad praxin digna
& necessaria reperiuntur. Editio ultima auctior & corrector [sic]*. Amsterdam, Petrus van den
Berge, 1661.

72. Johannes Crato von Crafftheim, *Johannis Cratonis à Kraftheim Consiliorum et epistolarum
medicinalium libri septem*, edited by Lorenz Scholze, Francofurti: Sumptibus Johannis
Petri Zubrodt, 1671.

73. Pietro Andrea Mattioli, *Opera quae extant omnia: hoc est, commentarii in VI libros Pedacii
Dioscoridis Anazarbei de medica materia: adjectis in margine variis Graeci textus lectionibus, ex
antiquissimis codicibus desumptis, qui Dioscoridis depravatam lectionem restituunt: a Casparo
Baubino ... post diversarum editionum collationem infinitis locis aucti: synonymiis quoque plantarum
et notis illustrati: adjectis plantarum iconibus, supra priores editiones plus quam trecentis (quarum
quamplurimae hic primum describuntur) ad vivum delineatis: De ratione distillandi aquas ex
omnibus plantis: et quomodo genuini odores in ipsis aquis conservari possint: Item apologia in
Amatum Lusitanum, cum censura in ejusdem enarrationes: Epistolarum medicinalium libri
quinque: Dialogus de morbo Gallico: Cum locupletissimis indicibus, tum ad rem herbariam tum
medicamentariam pertinentibus* Basle: Sumptibus Johannis Konig, typis excursit Joh.
Rodolphus Genath, 1674.

Section 3: Some statistics on the genre of Medical letters in the sixteenth-century

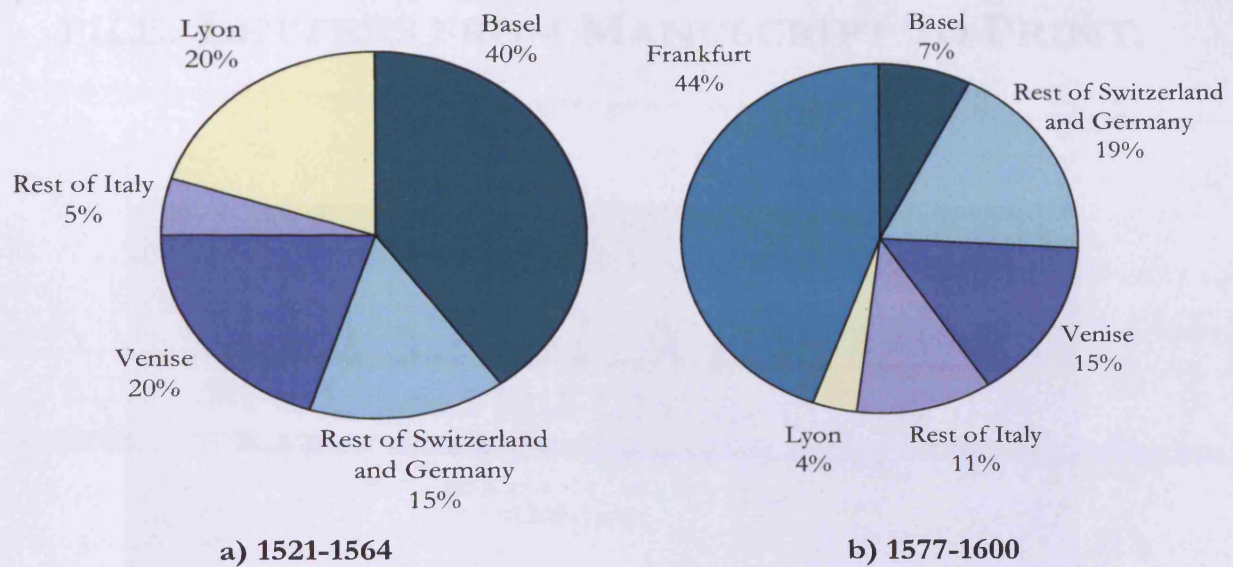


Figure 37: Locations of publications during two periods

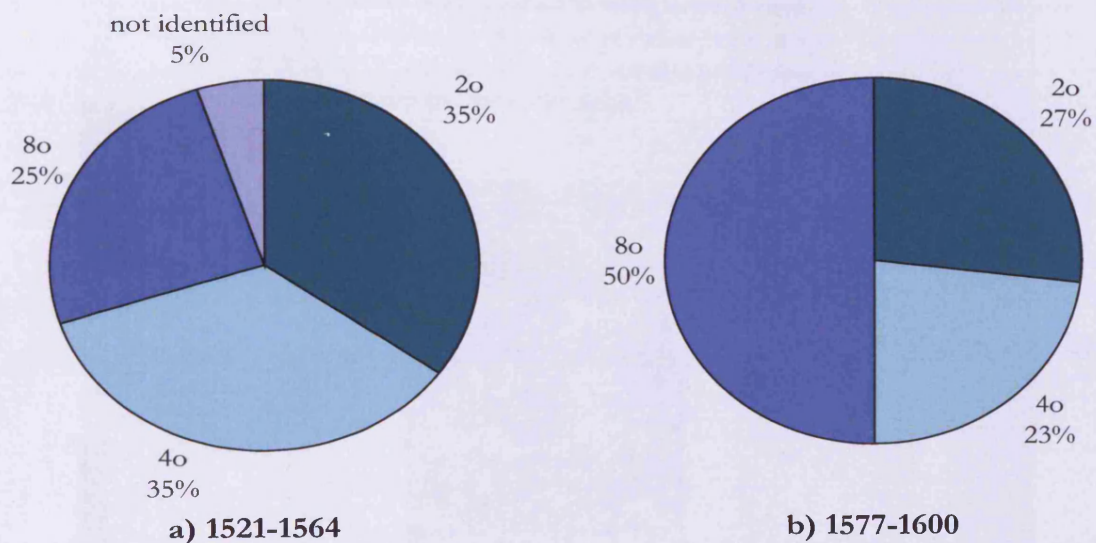


Figure 38: Format of publications during two periods

APPENDIX VII: THE *EPISTOLAE MEDICINALES*

FILE: LETTERS FROM MANUSCRIPT TO PRINT.

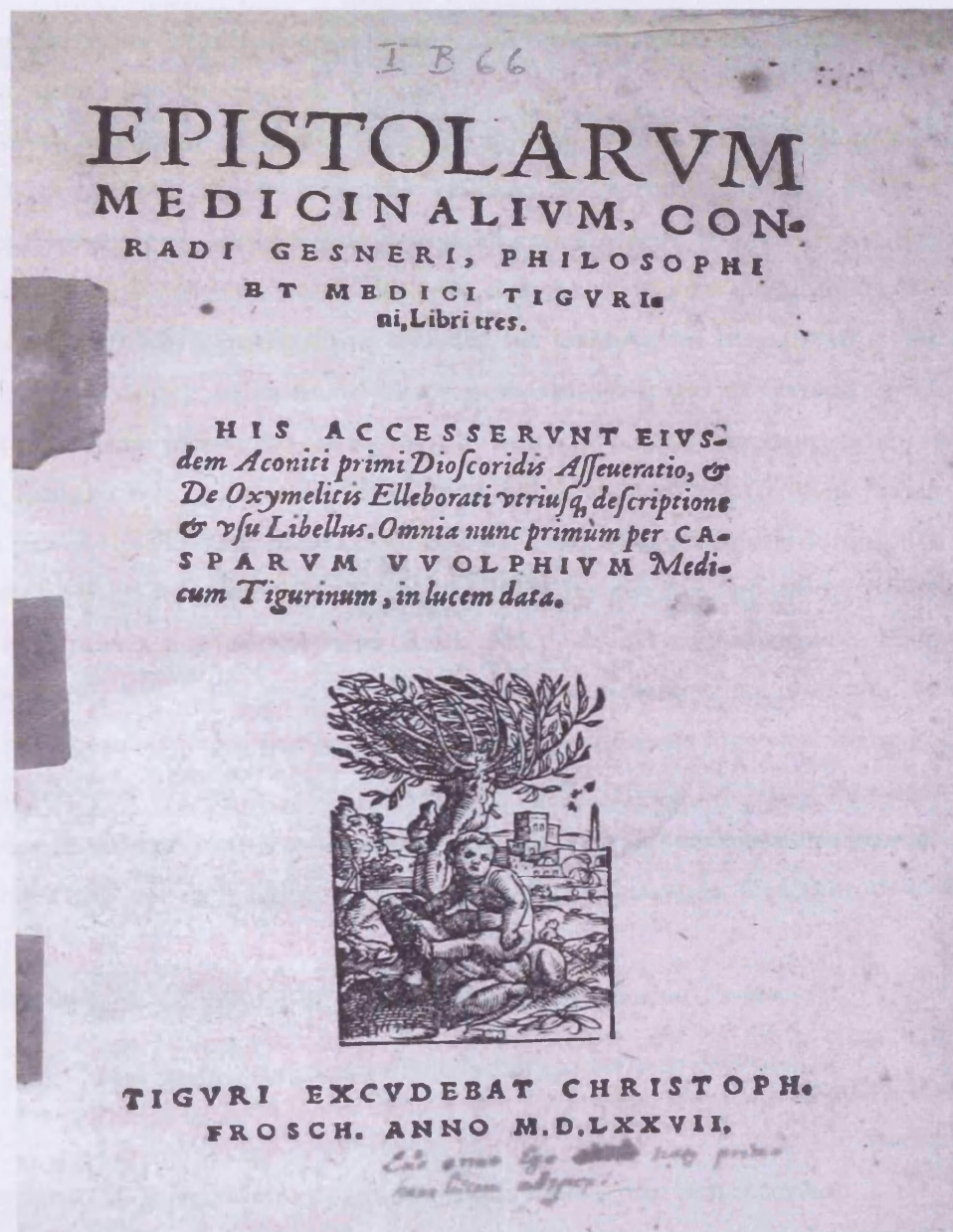


Figure 39: Title page of Gessner's *Epistolarum Medicinalium Libri III* (ZBZ IB66)

Section 1: Letters to the editor(s)

Five of the letters exchanged between Josias Simler and former correspondents of Gessner have survived, especially in UBB. In this appendix, one will find the transcript of the manuscript letters, retracing the history of the edition of the 1577 publication.

1. Achilles Gasser to Simler, 4 July 1575, ZBZ MsF60.39.

Humanissimo eruditoque viro Domnio Josiae Simlero, apud Tigurum artium professori, amico suo honorando, Zyrich.

Salutem et Pacem. Epistolae Cl[arissimi] V[iri] D[omini] Gessneri ad me et collegam meum D. Adolffum, fasciculum tibi tandem reditorum gaudeo ; Faxit Christus ut respublica litteraria boni aliquid inde tua opera capere queat. Id quod facile futurum spero, nam in eo viro nihil hactenus vel Zoilus ipse reprehendere juste potuit. Cum autem nullum tibi iudicium in medica professione tribuam, ut honeste ita humanissime facis, multi et scioli in pia memoriae amici nostri libros post obitum ipsius id facient, ego Gesneri mei lucubrationes incastigatissimas omnium aliorum doctorum censurae praeferrem. Quare audacter exemplaribus manuique ipsius fide nec quicquam vel mutes vel corrigas, nisi quaedam privata in illis sint, quae commode aut circa aliorum injuriam omittere velis, quod tibi in meis liberum facio. Poteris itaque schedulas eas pro nutu quam diu opportunum fuerit retinere et tandem per occasionem simili Mercurio ad me restituere. Porro Dominus Adolphus noster habet tibi pro missa salutatione plurimas gratias jubetque, ut te similiter amanter resalutem. Egoque pro isto tuo officio itidem gratias ingentes tibi ago ac ut petis in amicorum meorum album te lubens recipio, et quo possum favore te prosequar. Tu redde vices et vale in Christo cum omnibus tuis, quos ex me cum amicis quibuscumque plurimum saluta, praesertim excellentissimos medicos vestrates Dominos Wolffium et Kellerum. Pax tibi.

Augstburgi 4 die Julii anno gratiae 1575 raptim.

Tuus ex animo

Achilles P. Gasserus L.

Medicinae doctor.

P.S. Hieronimo Wolffio nostro epistolam reddi curavi, non jam rescribat.

2. Josias Simler to Abraham Musculus, 9 July 1575, UBB, Ms UBBGI68, 51 (from a copy)

Ornatissimo atque doctissimo viro D. Abrahamo Muscullo Bernensis Ecclesias ministro fideli domino et fratri in Christo honorando. Bernam.

S. Conradum Gesnerum Summum Philosophum et Medicum, quamdiu vixit, non tantum ut singularem amicum amavi, sed doctrinae gratia studiose colui et observavi, ac quamvis jam decennium fere elapsum sit post illius obitum, nihilominus tamen memoriam ejus sancta adhuc colo. Alia quidem illius studia fuerunt diversa a nostris, et in his dedit aliqua doctrina ejus monumenta in publicum Casparus Wolffius medicus et plura adhuc dabit: Sed fuerunt multa quoque illius studia ejus generis, ut non tantum medicis quam omnibusque studiosis utilia esse possint. In hoc genere sunt epistolae ad amicos scriptae, in quibus multa disputandi non tantum medica, sed physica quoque et philologica et nonnumquam etiam Theologica. Itaque cum nuper Vir Hieronymus Wolfius Augusta ad me mississet epistolas Gesneri ad Clarissimos medicos D. D. Gassarum et Occonem, eo consilio ut in publicum ederentur, facile mihi persuasit, ut et illum laborem subirem, et plures etiam aliunde conquirerem. Quoniam vero areta amicitia Gesnerus cum Aretio nostro b[onae]m[emoriae] conjunctus fuit, non dubito epistolas illius nonnullas lectu dignas in Aretii scriptis reperire posse: quare te summopere rogo, des operam, si fieri possit, ut illas conquiras, et ad me mittas. Quodsi alias quoque vel a D. Zerchinta, vel a D. Poperino impetraveris, et his conjuxeris, rem mihi facies gratissimam, neque tamen peto, ut [omnes] illius epistolae ad me mittant, sed illarum tantum quarum explicationem alicujus rei cognitu digna, aut quaestionem et dubitationem docte propositam contineant. Non dubito autem te facile hoc ab haeredibus Aretii impetrare posse, cum enim [externi] tam benigne epistolas ad se scriptas etiam non rogati miserint, cur nunc non plura de nostris hominibus et haeredibus amicissimi mei mihi pollicerer: Pluribus non agam, ne de tua fide et diligentia dubitare videar. Novi nihil apud nos, quod non ante nos scire potueritis. Bullingerus adhuc decumbit, et exigua aut nulla spes est recuperandae valetudinis, Vale. Tiguri 9 Juli 1575.

Tuus Totus
Josias Simlerus

**3. Josias Simler to Theodor Zwinger, Zurich, 12 July 1575, UBB,
FrGrMsII23, 442.**

S.P. Superioribus diebus V[ir].CL[arissime]. Augusta ad me missae sunt Gesneri viri pia[m] m[emoriae] epistolae ad clarissimos medicos D. Occonem et Gassarum scriptae, quas ut in publicum edam hortatur me Hieronymus Wuolfius Gesneri simul et horum amicissimus. Ego vero nihil libentius facio quam ut et viro doctissimo gratificar, et hoc officium Gesnero cuius amor nequaquam una cum ipso apud me extincta est perficiam: cuperem enim epistolas ejus plures edere, non has tantum quae Augustam scriptae sunt, et id etiam petit Typographus. Quare cum ad complures amicos Gesneri hac de causa scripserim, et idem fec[erit] Wolphius noster, te quoque V[ir] CL[arissime] non postremum inter amicos Gesneri de hac re per tuas interpellare visum est, teque obnixè rogo ut institutum meum adjuves. Velim autem ubi per occupationes alias licuerit, te colligere, si quas habes Gesneri ad te epistolas quae aliquod [pertinens] aut medicum problema tractant, et ad me mittere, quas salvas tibi restituum: deinde idem per te impetratum cupio a Plattero et Bohino, et aliis ad quos frequenter Gesnerus scripsit: spero autem viros optimos non gravatim fore ob veteris amici memoriam facturos, praesertim cum non absque exemplo hoc fiat, quando quidem aliorum quoque medicorum epistolae publicae extant. Da[bo]que autem operam ut haec tantum edantur, quae lectorem juvare aut delectare, minimum vero [laedere] possint: scis enim Gesnerum ipsum quamdiu vixit a rixis et contentionibus abhoruisse, et ego quoque id scribendi [modus] semper fugi: utinam nunquam contra voluntatem meam ad id [necessario] pertractus fuisset, ut aliis [rationibus] enim nimium altercando quotidie magis obscurantur quam explicantur: sed haec alterius temporis sunt; Nunc postulationem [jam meam] quam tuo amore fratris confidenter et simpliciter propono, tuae fidei commendo. (...) Tiguri 12 Julii 1575.

Tui studiosissimus.

Josias Simlerus.

4. Josias Simler to Heinrich Wolf, 24 July 1575, UBB GH26, 68

CL.V. humaniorum literarum professori celeberrimo D. Hieronymo Vuolfio domino et amico suo honorando.

Augustam

S. Nihil mihi hoc tempore jucundior accidere potuit tuis literis, vir clarissime, tum quod te summum virum inter gravissimas occupationes mei memoriam non abjecisse video, tum etiam quod me eo honore afficere voluisti ut iudicium et publicationem epistolarum optimi mei praeceptoris et amici sanctae memoriae ad me deferre statueris. Ego vero etsi nihil iudicii habeo in rebus medicis, tamen studium et laborem meum offero in his edendis quibus tamen velim rem, jungi alias quoque Gesneri epistolas quae aliquid philosophicum [et scitu] dignum continent, quales et apud Cl[arissimum] medicum Caesaris D. Cratonem inventientur (ad quem de hac re per amicos scribi curavi) et apud nonnullos alios cum Italos tum Germanos. Neque ita dudum est quod de hac re cum D. Thaddeo Duno medico Italo verba faci, ut autem idem accurateque agere tuae me excitarunt literae. Multum debeo Gesnero meo, quare laetor mihi occasionem aliquam offerri testandi studium et observantiam meam in sancta [colenda] natura et de mortui amici memoria. Velim quidem Gasparum Wolphium qui bibliothecam ejus possidet, monumenta quaedam doctrinae illius, qualia non pauca habet, in publicum edere, sed quia ille procrastinatione quadam in [his] utitur, vel propter negotia, vel quod non tam ut Gesnerus laboriosus sit, spero tum meam tum aliorum in simili studio operam studiosis non ingratam fore. Porro quod tam tarde literis tuis respondeo cupio me tibi excusatum esse, nam tuas quae datae sunt XII Cal Aprilis huic domi XXIII Junii accepi, idque testabitur literis suis Felix [Kavarus] affinis CL[arissimi]V[iri] D[octoris] Achillis Gassari. D[ominum] D[octorem] Occonem plurimum salutare cupio, cui scripsissem si per nuntii festinatione licuisset. Vale V[ir] Cl[arissime] Tiguri XXIII Julii 1575.

Tui observantissimus

Josias Simlerus.

**5. Josias Simler to Theodor Zwinger, 19 February 1576, UBB Ms
UBBFrGrMsII26, 365**

Qui tibi has litteras reddit Vir Clarissime Pellicani filius est, ad vos studiorum gratia veniens, quare rogo ut juvenem optimum tua autoritate et consilio quacumque in re opus habuerit, tueri et juvare velis. Et quamvis non dubitem pro tuo erga bonas literas amore adolescentem hunc tibi curae fore, tamen rogo ut ad eam benevolentiam, qua omnes bonarum litterarum studiosos complecteris, aliquid etiam propter meam commendationem addas. Gesneri Epistolas, quas a te dudum accepi, curavi describi, easque ad te per hunc nuntium remississem, nisi lecto affixus essem id enim me impediit quo minus eas colligerem dispersas adhuc inter alias Gesneri epistolis permixtas: cum primum convalueram, dabo operam ut salve ad te redeant. Vale Vir Clarissime. Tiguri 19 Febr 1576.

T[uus]T[otus] Studiosissimus,
Josias Simlerus.

Section 2: Editing Gessner's letters:

Corrections and censorship

Letter dated 26 March 1564.

ZBZMsF38.341	<i>Ep. Med.</i> , f. 94 r-v
<p>Clarissimo viro D. D. Johanni Funcchio patritio Memmingensi, affini charissimo suo.</p> <p>Gratissimum est officium tuum, quo meas ad amicos et illorum ad me literas, subinde transmittis, charissime D. affinnis et aequum erit, ut aliquando de gratitudine cogitem.</p> <p>Mitto nunc ad D. Occonem literas et alias [Isadam] ad D. Cogalium quae forte per Lindaviam rectius curavemur: sed quia dubito: ad te nunc mitto: alias si monueris, mutaveris, etsi non ita frequentore ad eum scribere soleam. De Christ Vega non [pauce] quicquam D. Occoni me scripsisse, propter occupationes [ut] semper festino.</p>	<p>Conradus Gesnerus Joanni Funckio medico clarissimo, Memmingae</p> <p>Gratissimum est officium tuum, quo meas ad amicos et illorum ad me literas, subinde transmittis, charissime D. affinnis et aequum erit, ut aliquando de gratitudine cogitem.</p> <p>Flos a te missus, hepaticae albae nomine describitur à Valerio Cordo descriptionis plantarum libro 2 capite 115 ubi ego iconem quoque praemisi. Antiquum ejus nomen apud Graecos aut Latinos nullum invenio. Saxones et alii quidam Germani Laber Blumli vocant, unde Hepaticae nomen Cordus finxit: existimatur enim hepati prodesse, est quidem subamara. Poloni vocabulo quodam suo appellant, quod nostra lingua sonare Neünkrafft/</p>

Graece *ἐννεαδύναμιν*, ut Schneebergerus meus annotavit.

Ego his diebus me purgavi scrupulo uno Graiolae herbae tritae, admixto cum rob sambuci acinorum: unde copiosè et vomitu et alvo purgatus sum a pituita viscosa et aquis maxime, *non sine molestia*⁶¹⁰. Hoc etiam D. Occoni scripsi.

Nuper cum remedia quaedam darem pleuriticae anui, decoctionem foenograeci meam, et parum oxymelitis, etc. ea melius habere coepit, et per aluum deiecit scarabei genus nigrum, longis pedibus, et cornibus quoque longis, ac flexilibus, articulatis, undique plenum pure, vivum, longitudine duorum articulorum digiti: prius autem aliquandiu in ventre nescio quid inquietum et vellicans sentire se querebatur.

Haec d. Occoni non scripsi: cupio autem te communicare.

Vale. Tiguri 1564. Martii die 26.

Librum a D. Occone missum ad te satis erit si tuto miseris.

Ego his diebus me purgavi scrupulo uno Graiolae herbae tritae, admixto cum rob sambuci acinorum: unde copiosè et vomitu et alvo purgatus sum a pituita viscosa et aquis maxime, non sine molestia. Hoc etiam D. Occoni scripsi.

Nuper cum remedia quaedam darem pleuriticae anui, decoctionem foenograeci meam, et parum oxymelitis, etc. ea melius habere coepit, et per aluum deiecit scarabei genus nigrum, longis pedibus, et cornibus quoque longis, ac flexilibus, articulatis, undique plenum pure, vivum, longitudine duorum articulorum digiti: prius autem aliquandiu in ventre nescio quid inquietum et vellicans sentire se querebatur.

Vale. Tiguri 1564. Martii die 26.

⁶¹⁰ 'non sine molestia' is added in the margin

Letter dated 21 January 1564 [redated 1565]

MsF60.52	<i>Ep. Med</i> 96r.
<p>CL.V. D. Doctori Jo. Funckio, medico praestantissimo, domino et affini charissimo suo, Memmingen</p> <p>S. Scripsi ad te charissime D. affinis, ante dies 14 fere.[Tunc vero nuncius non dabatur]. Ante octos dies mater tua commisit duos fasciculos meos literarum Lindaviandum mittendos, Memmingensi cui (de quoque forte ad te scribet) nomen mihi excidit; mercedem etiam addidit, quam miseram. Is nescio quo spiritu agitatus, longe aliam viam ingressus, cum miliari hinc discessisset, literas aperuit, laceravit, disjecit. Earum partem subsecutus, illum quidam forte collegit et ad proximi pagi concionatorem detulit: qui manum meam cognovit, et proprio nuncio ad me remisit. Literae ternae omnino perierunt, quas in aula Caesaris ad D. D. Julium, Cratonem, et Secretarium quemdam scripseram: quibus nunc iterum alias paro literas: et idcirco haec ad te brevius. Mitto autem meas illas amissas, quales recepi; poteris spero adhuc legere. Margo unus periit, quem (ut vides) utcumque explevi.</p>	<p>Conradus Gesnerus Joanni Funckio medico</p>

Hodie alteras tuas accepi, unà cum gratissimis mihi D. Occonis, et D. Culmanni literis, quibus respondebo vel nunc, si liceat, vel proxime. D. Culmannus nosti puto, convictorem meum olim fuisse, anno aut amplius. Vir est plane bonus et eruditus. Pro tuo officio quod nobis in transmittendis mutuis literis offers, gratias ago. Gratum fuit et quod de cichorii puris floribus destillatis scribis: an vero calculi illi ejus usu in puero expulsi, a renibus aut vesica oriundi fuerint, non satis exprimis.

De arteriotomia illa, quae meo consilio feliciter successit, non vacat nunc scribere. Summa est: Chirurgus [*in the margin: Felix Wirth nomine*] hic laborans immani hemicranico dolore, meo consilio arteriam in crotapho affecto (ubi arteria inflata apparebat) per transversum amputavit, et subito convaluit, et hactenus multis jam annis non rediit dolor: cum prius anno interposito rediisset.

Mira est historia, aderat et D. Thaddeus Dunus. oxymeli quoque meum non vacat jam describere, multum quidem a Julianico distat.

His diebus pleuriticum [*in the margin: M. Balthasarem bibliopola: qui annos 70 excedit*] senem, vena non secta, oxymelitis usu et decoctione foenograeci mea, curavi, Dei gratia, probe.

Is vero sibi antequam me accerseret, cataplasma ex absinthio in aceto fervefacto,

Hodie alteras tuas accepi, unà cum gratissimis mihi D. Occonis, et D. Culmanni literis, quibus respondebo vel nunc, si liceat, vel proxime. D. Culmannus nosti puto, convictorem meum olim fuisse, anno aut amplius. Vir est plane bonus et eruditus. Pro tuo officio quod nobis in transmittendis mutuis literis offers, gratias ago. Gratum fuit et quod de cichorii puris floribus destillatis scribis: an vero calculi illi ejus usu in puero expulsi, a renibus aut vesica oriundi fuerint, non satis exprimis.

De arteriotomia illa, quae meo consilio feliciter successit, non vacat nunc scribere. Summa est: Chirurgus hic laborans immani hemicranico dolore, meo consilio arteriam in crotapho affecto (ubi arteria inflata apparebat) per transversum amputavit, et subito convaluit, et hactenus multis jam annis non rediit dolor: cum prius anno interposito rediisset.

Mira est historia, aderat et D. Thaddeus Dunus. oxymeli quoque meum non vacat jam describere, multum quidem a Julianico distat.

His diebus pleuriticum senem bibliopolam septuagenarium, vena non secta, oxymelitis usu et decoctione foenograeci mea, curavi, Dei gratia, probe.

Is vero sibi antequam me accerseret, cataplasma ex absinthio in aceto fervefacto,

calidum ter quaterve adhibuerat, quo alias se
aiutum aiebat, nunc fere nihil prodesse. Hoc
quidem ex absinthio remedium aliâs etiam
ab Empirico quodam valde mihi est
commendatum in pleuritide, ut non dubitem
ipse etiam ejus periculum facere alias. Haec
scio te cum D. Adolpho communia habere.

Vale, Tiguri 1564. Januarii die 21.

T. Con. Gesnerus

D. Adolpho me excusa, quod non
scribam: connivent oculi, nimia jam nocte.
Scribem cum proximo quoque nuncio.

calidum ter quaterve adhibuerat, quo alias se
aiutum aiebat, nunc fere nihil prodesse. Hoc
quidem ex absinthio remedium aliâs etiam
ab Empirico quodam valde mihi est
commendatum in pleuritide, ut non dubitem
ipse etiam ejus periculum facere alias. Haec
scio te cum D. Adolpho communia habere,

cui me excusa, quod non scribam:
connivent oculi, nimia jam nocte.

Vale, Tiguri 1565. Januarii die 21

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A51 : Miscellaneous XVI-XVII

C32

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Thesaurus Hottingerianus: Johann Heinrich Hottinger (1620-1667), Collection of original documents and copies of the sixteenth and seventeenth century

F 38.

F 41

F 42.

F46.

F 60.

F61

F80

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S33	S82	S101
S35	S84	S103
S36	S85	S104
S37	S87	S105
S67	S88	S106
S71	S92	S107
S72.	S93.	S108
S74	S95	S109
S75	S96	S110
S79	S97	S112
S80	S99	

Including: S204 a-c, **Thesaurus Medicinae Practicae...** where numerous letters from and to Gessner can be found.

S204a : vol 1

S204b: vol 2

S204c: Vol 3

MsV320.3: A leaflet of copies of letters from Gesner to others, from the original kept in Schaffhausen.

Z VII.118

A collection of *epistolae medicinales* to and from Heinrich Rahn (d. 1756), including an anatomical plate attributed to Gesner.

Z VII.119

Notebook of Johann Heinrich Rahn, where he collated Gessner's and Wolf's cures and recipes most probably from MsS204a-c. In the end of the volume a letter and consilium by Thomas Erastus on the plague, addressed to Gessner is bound, with the contents of his answer to Erastus, in the form of a summary.

Z VIII, 414-415

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